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6. All contributions must be original.

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IMPLEMENTATION OF EO 23 AND THE PUBLIC IMAGE OF DENR ENFORCERS: BASIS FOR INTERVENTION

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ABSTRACT

The purpose of this quantitative and non-experimental study was to ascertain the influence of implementation of EO 23 on the public image of DENR Enforcers. Executive Order 23 is the moratorium on the cutting and harvesting of timber in natural and residual forests and the creation of anti-illegal logging task force. The study employed a correlation procedure because the problem necessitated ascertainment of the strength of relationship among variables. Data were derived from a duly validated survey questionnaire that were distributed to the 165 respondents who were chosen using universal sampling. Respondents were either managers, supervisors or liaison officers in the wood-based industries listed in Davao Region. Results showed that EO 23 was extensively implemented and that the public image of the DENR Enforcers was high. Additionally, the correlation test revealed an overall positive and significant but weak relationship between the extent of implementation of EO 23 and the public image of DENR Enforcers. The study further revealed that only the creation of the Anti-Illegal Logging Task Force in EO 23 could significantly influence the public image of DENR enforcers. Considering the findings, an intervention scheme/strategy for the implementation of EO 23 was proposed.

Keywords: ***Public Administration***; ***EO 23***; ***Anti-Illegal Logging Task Force***; ***DENR Enforcers***; ***Public Image***; ***Region XI***; ***Philippines***

INTRODUCTION

Complaints of corruption in the Department of Environment and Natural Resources have marred the image of this government agency (Villanueva, 2016), which prompted the DENR secretary during the Aquino administration to prioritize the campaign against corruption and illegal logging (DENR, 2010). Since the 80's, the country has already lost about a third of its forest cover to both legal and illegal logging (Key Facts-FAO, 2016). For this reason, Pres. Benigno S. Aguino II, issued Executive Order (EO) No. 23 on February 1, 2011, declaring a moratorium on the cutting and harvesting of timber from the natural and residual forest and the creation of national anti-illegal logging task force.

While the LGUs and some environmental groups were eager about the policy, the wood-based industries were indifferent towards it since it would affect them greatly so that they made several appeals and protests. The Philippine Wood Producers Association (PWPA) warned of the widespread impact that the EO would have on jobs and revenues. It projected losing at least P30 billion in investments and \$1 billion in annual exports from the logging ban. This sentiment was echoed by the Society of Filipino Foresters, Inc., which asserted that continuing the logging ban would result in the retrenchment of 650,000 workers, drive up the cost of wood and housing units, and would have serious repercussions on the economy (Bendijo, 2016).

Nonetheless, the importance of having forest reserves cannot be undervalued. Forests keep watersheds, avert erosions and restrain climate change. Forests are essential for men and beasts to survive. Yet, despite human's dependence on forrests, people still allow illegal logging activities that destroy forests (World Wildlife Fund, 2016).

This is where the concerns of this paper lay. The issuance of EO 23 was supposed to safeguard the forest reserves in the country because it creates an anti-illegal logging task force alongside the moratorium on the cutting of specific trees. However, it seemed that Executive Order No. 23 has not been c Q

`I4Uompletely implemented, which somehow affected the image of the DENR enforcers.

Parenthetically, the researchers have not actually come across a local study that scrutinized the relationship between the implementation of EO 23 and the public image of DENR Enforcers in the Davao Region. Hence, the findings of this study would fill the gap in the literature regarding these topics. Moreover, the findings of this study would be beneficial for the present administration as this could become the basis of intervention programs for the Department of Environment and Natural Resources (DENR).

STATEMENT OF THE PROBLEM

The main objective of this study was to ascertain the influence of the implementation of EO 23 on the public image of DENR Enforcers. Particularly, this study would like to answer the following questions:

1. What is the extent of implementation of EO 23 in Davao Region in terms of a moratorium on the cutting and harvesting of timber in the natural forests, and creation of the anti-illegal logging task force?
2. What is the level of the public image of the DENR Enforcers in Davao Region in terms of rhetoric, behavior, representation, and visual impression?
3. Is there a significant relationship between the implementation of EO 23 and the public image of the DENR Enforcers in Davao Region?
4. Which of the two indicators in the independent variable can best influence the level of the public image of the DENR Enforcers?
5. What intervention program could be proposed based on the findings of this study?

METHOD

This study was descriptive correlational, which used survey questionnaires in the gathering of data. Respondents were chosen thru universal sampling that included 165 people all of whom were directly involved in the wood industry in Davao Region. They were owners, managers, supervisors and liaison officers. 30 respondents were from Compostela Valley, 50 from Davao City, 40 from Davao del Norte, 25 from Davao Oriental and 20 from Davao Del Sur.

Research Instrument

The questionnaires were based on Executive Order No. 23, and the adapted questionnaire on public image. Essentially, since the items in the questionnaires were modified ones, the questionnaires were subjected to a reliability testing using Cronbach's Alpha, which is the most common measure of internal consistency or reliability because it analyzes the general agreement between multiple items that make-up a compound score of a survey measurement of a given construct. (Laerd Statistics, 2013).

The 15-item statements in the implementation of EO 23 got a Cronbach's Alpha of .831. Similarly, the 12-item statements in the public image of DENR enforcers got a .919 Cronbach's Alpha. Both results mean a strong or excellent internal consistency of the items for the scale used. Below is a five-point Likert's scale used in the interpretation of the overall responses in the questionnaire.

Range of Mean	Descriptive Level
4.20 - 5.00	Very High
3.40 - 4.19	High
2.60 - 3.39	Moderate
1.80 - 2.59	Low
1.00 - 1.79	Very Low

FINDINGS

Extent of Implementation of EO 23 in Davao Region

Table 1 shows that the extent of implementation of EO 23 is high in both indicators. This means that the respondents were convinced that, time and again, the DENR enforcers have implemented the moratorium on the cutting and harvesting of timber in the natural forests.

TABLE 1. IMPLEMENTATION OF EO 23 IN DAVAO REGION

Indicator	SD	Mean	Descriptive Level
Moratorium on the Cutting and Harvesting of Timber in the Natural Forests	0.65	4.08	High
Creation of the Anti-Illegal Logging Task Force	0.62	4.15	High
Total	**0.53**	**4.11**	**High**

The question items that got very high mean scores for the moratorium were: Developing a National Greening Program (NGP) in cooperation with DepEd, CHED, DILG, DSWD and DBM; and turning over of logs derived from clearing of the road-right-of-way by DPWH to the DENR, preparing sites for tree plantations and silvicultural treatments and other activities.

This means that the respondents have acknowledged the efforts of the DENR enforcers in implementing EO 23, especially in the greening program and the turning over of logs to DENR. Logs that were turned over to the DENR were not only those from the expansion of roads but including the confiscated logs from illegal logging (Lagasca, 2010; Macatuno, 2016), which is happening all over (Punzalan, 2017), however, confiscated logs are exclusively for the disposal of the DENR (DENR Memorandum Order No. 36 s.1988).

To discuss further, the high score given by the respondents in the implementation of EO 23 means that the DENR officials followed the mandate on confiscated logs disposal, such as the confiscated logs may be sold at public auction by the RED/CENRO/PENRO, or their authorized representatives, and that confiscated forest products shall be disposed of through the Bids and Awards Committee (BAC). Yet, disposal of logs has some exemptions. Here are the examples of logs that are exempted from disposal by the DENR: "Those subjects of judicial proceedings until proper authority is obtained for their disposition from the court where the case is pending. Those earmarked for donation to other agencies or charitable and similar institution; and those determined by the DENR for its own infrastructure needs" (DENR Memorandum Order No. 36 s.1988).

Moreover, the data revealed that respondents also agreed that the DENR has created the anti-illegal logging task force, with which they rated it as high. Two items in the questionnaire got very high mean scores: Ensured the implementation of EO 23 under the supervision of DENR, and assisted the DENR in the enforcement of other environmental laws. This means that as wood-based industry workers, owners or operators, they personally observed that the anti-illegal logging task force are doing their jobs very well by visiting sites that are prone to illegal logging to make sure that no illegal activities, logging are taking place, and if there are, offenders could be dealt with immediately.

The result corroborated the reports about the activities of the anti-illegal logging task force all over the country. Because of the anti-illegal logging task force, illegal logging has been maximally restrained, and thousands of logs were confiscated, especially in Central Luzon. Forest guards, totaling to 181, were positioned around the 480,000 hectares of forests throughout Central Luzon to do the round-the-clock monitoring, especially in hotspot areas (DENR, Region 3, 2017). In Region 10, arrests were made for those who transported forest products without proper documentation. Logs were also confiscated and turned over to the DENR. These incidents led to the passage of a resolution enjoining mayors and barangay chairmen to actively participate in the implementation of EO 23 (DENR, Region 10, 2017). In Mindanao, the anti-illegal logging efforts were converted from civilian operations into an active military operation, confiscating illegally cut logs and apprehending violators (DENR, Region XI, 2017).

Level of Public Image of the DENR Enforcers in Davao Region

Table 2 shows that the level of the public image of the DENR Enforcers is high on all the indicators. The data manifested that the respondents were convinced that the DENR Enforcers have a good public image. This means that the respondents agreed that time and again, the DENR enforcers have well manifested their public image in terms of rhetoric, behavior, representation, and visual impression.

These are important indicators of public image that would explain the accuracy of information given by the DENR Enforcers to the public servants (Amendola, 2004).

TABLE 2. LEVEL OF PUBLIC IMAGE OF THE DENR ENFORCERS IN DAVAO REGION

Indicator	SD	Mean	Descriptive Level
Rhetoric	0.91	3.91	High
Behavior	0.76	3.96	High
Representation	0.75	3.96	High
Visual Impression	0.75	3.98	High
Total	**0.66**	**3.96**	**High**

Moreover, the result conveys that the respondents believed that DENR enforcers have supplied accurate and truthful information about their operation to the media and the public. They also believed that DENR enforcers are responsive to the needs of the wood-based industries amidst the implementation of EO 23, which realistically have hampered some of the operations of the industry. Importantly, the respondents believed that their voice was heard by the DENR as stakeholders were invited to some discussion points. Additionally, the high result on the public image showed that the respondents believed that the DENR enforcers were true to their work and are displaying accurate image of the organization for the benefit of the people in the region. Other people, especially those affected by the implementation of EO 23, may not actually like the consequences of the policy implementation, but the enforcers were only following their mandate as credible public servants (Amendola, 2004; DENR - 3, 2017; DENR-10, 2017; DENR-XI, 2017).

Significance of the Relationship between the Implementation of EO 23 and the Public Image of the DENR Enforcers

Table 3 displays the result of the correlation test between variables, which revealed an overall weak linear relationship between the extent of implementation of EO 23 and the level of the public image of DENR enforcers.

Although weak, the relationship was positive and significant. This type of relationship indicated that for every increase in the value of the independent variable, an increase in the value of the dependent variable will surely occur (Investopedia, 2017; Ratner, 2017). To contextualize it in this study, it means that the increase in the extent of implementation of EO 23 will surely lead to the increase in the level of the public image of DENR enforcers owing to the fact the relationship is positive and significant.

The result implies that should the DENR want their enforcers or the agency to have an outstanding public image, they must fully implement the policy on the moratorium on the cutting and harvesting of timber in the natural forests as well as the creation of the anti-illegal logging task force. If not, then their reputation would be at stake (Villanueva, 2016).

TABLE 3. SIGNIFICANT RELATIONSHIP BETWEEN THE IMPLEMENTATION OF EO 23 AND THE PUBLIC IMAGE OF THE DENR ENFORCERS

EO 23	Public Image of the DENR Enforcers				
	Rhe	**Beh**	**Rep**	**Vis Imp**	**Over-all**
MCHTNF	.213** (.006)	.219** (.005)	.274** (.000)	-.035 (.653)	.205** (.008)
CAILTF	.273** (.000)	.176* (.024)	.341** (.000)	.079 (.314)	.265** (.001)
Overall	.290** (.000)	.236** (.002)	.367** (.000)	.025 (.754)	.280** (.0000)

Legend:
MCHTNF – *Moratorium on the Cutting and Harvesting of Timber in the Natural Forests*
CAILTF – *Creation of the Anti-Illegal Logging Task Force*
Rhe – *Rhetoric*
Beh – *Behavior*
Rep – *Representation*
Vis Imp – *Visual Impression*

In fact, many have expressed doubt on the dedication of DENR in implementing the policy. For example, environmentalists questioned the legality of the release of a tree-cutting permit to Bangko Sentral ng Pilipinas (BSP), the latter having cut several pine trees in their construction site in Loakan (Addatu, 2017).

In another scenario, there is still a lot of illegal logging operating in the country. In Davao Region alone, there were several apprehensions and cases filed against illegal loggers. This proved that notwithstanding the implementation of EO 23, especially the creation of the anti-illegal logging task force, illegal logging activities are still present in the area (SunStar, 2017 Feb. 4). In the Region VI, there were also 23 cases filed against violators of forest laws (DENR-VI, 2017).

Significant Influence of the Implementation of EO 23 on the Public Image of the DENR Enforcers

Table 4 presents the result of the regression analysis. The data revealed that the extent of implementation of EO 23 could influence the level of the public image of DENR enforcers by 8.2 percent only, which indicates a very little influence. This result implies that respondents are looking for something more from the DENR not only to the extent of implementing the policy. In other words, the 91.8 percent of the influence on DENR's public image could be attributed to other factors rather than the implementation of EO 23. In other words, the wood-based industries are not only conscious on the expanse of the implementation of EO 23, but on how this policy is implemented by the agency. The image of the agency has been marred by corruption for so many years (Villanueva, 2016), and restoring the agency's image is much of a hard work since the negative reputation has already been ingrained in the people, especially those directly affected by the agency's corruption (DENR, 2010).

TABLE 4. SIGNIFICANT INFLUENCE OF THE LEVEL OF IMPLEMENTATION OF EO 23 ON THE LEVEL OF PUBLIC IMAGE OF THE DENR ENFORCERS

		Public Image of the DNR Enforcers			
Implementation of EO 23 (Indicators)		*B*	β	*t*	*Sig.*
MCHTNF		.120	.083	1.441	.152
CAILTF		.229	.087	2.646	.009
R	.286				
R^2	.082				
F	7.214				
ρ	.001				

Legend:
MCHTNF – *Moratorium on the Cutting and Harvesting of Timber in the Natural Forests*
CAILTF – *Creation of the Anti-Illegal Logging Task Force*

Moreover, the effect of EO 23 on wood-based industries is undeniably huge that it affected the rate of income and employment of communities directly affected by the policy. For one, the number of processing firms has diminished from hundreds of robust wood processing industries to only a handful left (Israel, 2017). EO 23, according to some, has stopped legitimate wood-based industries by not renewing their permit to operate, forcing them to lay-off their workers. But illegal loggers continued with the operations (Angeles, 2012).

CONCLUSION

After the scrutiny of the findings of this study, these conclusions are drawn: Both the extent of implementation of EO 23, and the level of the public image of DENR enforcers in Davao Region are high, which suggests that respondents believed that the DENR enforcers are doing their jobs time and again. Moreover, the study concluded a weak but positive and significant relationship between the extent of implementation of EO 23 and the level of the public image of DENR enforcers, which suggests that as implementation increases, the public image will also increase. Furthermore, the influence of the extent of implementation of EO 23 on the level of the public image of DENR enforcers is less than ten percent only, which suggests that there are still factors contributory to raising the public image of DENR enforcers besides the EO implementation.

Lastly, the findings of this study affirmed the matrix-based approach conservation theory (Lindenmayer and Franklin 2003; Noss and Cooperrider, 1994) because it proved to be a harmonizing strategy of the government in preserving the forest and at the same time sustaining the wood-based industries. Also, the positive and significant result of the test of correlation affirmed William Benoit's (1995) Image Restoration Theory that certain strategies can restore a damaged reputation.

RECOMMENDATION

Since the study found a positive and significant correlation between the extent of implementation of EO 23 and the public image of DENR enforcers, the researchers suggest that the DENR enforcers must adopt the following intervention strategies: (1) Strengthening of partnership with wood-based industry and the civil society, (2) Periodic updating of Forestry laws and regulations to guide the industry players and encourage self-regulation, (3) Review of EO 23 for equitable outcomes, (4) Invite sectoral representatives (wood-based industries, labor sector, business sector, foresters, etc.) to participate in the policy review, (5) Submit the result of the policy review to the proper party for further scrutiny and consideration of the results, (6) DENR to educate the public on EO 23 through Information, Education and Communication (IEC) Campaign to gain support in the implementation of the policy, (7) Intensify Information, Education Communication (IEC) program, (8) IEC should be done by Region, starting off with those "hotspot" areas in the region, (9) Distribution of leaflets on EO 23, and (10) Conduct of fora and information drive highlighting various environmental laws to be attended by stakeholders.

The researchers believe that adopting the proposed intervention strategies will complete and strengthen the link between the two variables being studied.

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A STRUCTURAL EQUATION MODEL ON PUBLIC IMAGE OF BROADCASTERSIN REGION XI, PHILIPPINES

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ABSTRACT

This study aimed to determine the best structural model for the public image of broadcasters in Region XI, Philippines. It likewise aimed to establish the interrelationship among its variables. Data were collected from the four hundred radio listeners who responded to the call to participate in this study. A duly validated questionnaire was utilized in gathering the data. The descriptive statistics used revealed that broadcasters in Region XI have high levels of cultural intelligence, journalistic function, ethical principles, and public image. Moreover, the Pearson correlation test revealed a strongly positive and significant relationship between the independent and dependent variables. It was also found that, collectively, cultural intelligence, journalistic function, and ethical principles can influence the public image of radio broadcasters by fifty percent. Interestingly, this study revealed that the journalistic function of broadcasters, consisting of the interpretive and populist-mobilize functions, is the best fit model of the public image of broadcasters having passed all indices criteria of the goodness of fit. The findings suggest that radio broadcasters should concentrate on relevant social, cultural and political issues confronting society and that ordinary people should be given the chance to express their views on subjects that are important to them.

Keywords: ***Public Administration*; *Structural Equation Modelling*; *Cultural Intelligence; Journalistic Function; Ethical Principles; Public Image; Region XI; Philippines***

INTRODUCTION

There have been allegations that some broadcasters are ACDC (Attack-Collect, Defense-Collect). They allegedly accept cash from politicians and other personalities in exchange for a good press release, forgetting the principles of ethical journalism (Lacorte and Cayabyab, 2016; Rappler, 2016). Corruptions in the media were even documented especially during elections (Floretino-Hofileña, 2004), which proves that corruption in the media happens.

The media have emerged as probably the most important influence on how people vote (Prior, 2013), which makes their role a crucial one. People expect media to be morally upright and a vanguard of truth. Media personnel that report crooked news reporting is doing a disservice to the people, which could result in a tragedy of the Philippine democracy (Robles, 2012).

Consequently, the audience' perception of the image of the broadcasters or the media depends largely on the journalistic function, ethical principles, and cultural intelligence of the latter (Alonso, 2015). Hence, it is important for broadcasters to abide by the standards of their profession and to possess the intelligence that their field so requires. Unfortunately, some broadcasters or media practitioners today appear neglectful to these standards (Riordan, 2014).

Nowadays, a lot of media personnel do not seem to mind the importance of respect towards cultural norms and traditions. This happening, as Livermore (2009) put it, have undermined teamwork, sacrificed productivity, and diminished people's trust. These somehow marred the image of media personnel.

This problem is not confined to the Philippines but also happening elsewhere in the world. In Indonesia, for instance, the media industry is polluted by corrupt practices that have been ingrained since time past. The practice of accepting favors and seeking gratuities are commonplace and are happening at press conferences and other media events (Maddison, 2016; Triastuti, 2012).

In the Philippines, the Philippine Center for Investigative Journalism reported that nowadays the bigger and more profitable media agencies managed to ensure that their front liners and gatekeepers stayed the course of good journalism. Although there are some cases where big media faltered and failed the standards of professional and ethical conduct. No less than the President of the Philippines, PRRD, recognized the corruption in the media that cost the lives of many of them (Lacorte and Cayabyab, 2016).

With the above incidents, the media has somehow lost its credibility and may eventually lose their face in the process. But despite these contentions, the researcher has not come across of any study conducted on the public image of broadcasters especially in the local setting. So, as a media practitioner, the researcher is interested in investigating the public image of broadcasters in Region XI. Also, the researcher is keen on finding a structural model fit on the public image of broadcasters.

STATEMENT OF THE PROBLEM

The main objective of this study was to find a structural model that best fit the public image of broadcasters. Significantly, this study delved into the following objectives:

1. To assess the level of cultural intelligence, journalistic function, ethical principles, and the public image of broadcasters in Region XI.
2. To determine the significant relationship between cultural intelligence, journalistic function, ethical principles and public image of broadcasters in Region XI.
3. To find out which among the independent variables has a significant influenceon the public image of broadcasters in Region XI?
4. To come up with a structural model that will best fit the public image of broadcasters in Region XI.

Hypothesis

Three null hypotheses were tested at 0.05 level of significance:

1. There is no significant relationship between cultural intelligence and public image, journalistic function and public image, and ethical principles and public image of broadcasters.
2. Cultural intelligence, journalistic function, ethical principles do not significantly influence the public image of broadcasters.
3. There is no structural model that best fits the public image of broadcasters.

Theory

This study is anchored on the Principles of Public Service Broadcasting advocated by Michael Tracey (1998). He purported that in a public system, radio and television producers acquire money to make programs; in a commercial system, radio and TV producers make programs to acquire money. These principles illustrated the differing principles to which broadcasting is built. They shape and guide the performance of the broadcasting institution and powerfully suggest its potential worth. Using this theory in the context of this study suggests that the cultural intelligence, journalistic function and ethical principles of broadcasters define their public image; their worth as perceived by their audience is commensurate to their CQ level, their performance as a journalist, and their observance of the ethical principles of broadcasting.

CONCEPTUAL FRAMEWORK

There are three independent variables in this study. *Cultural Intelligence* with strategy, knowledge, motivation, and behavior (Ng, Van Dyne, and Ang, 2012) as indicators. *Journalistic Function* of broadcasters, with interpretive function, adversarial function, dissemination function, and populist-mobilize function (Yang and Arant, 2014) as indicators. And *Ethical Principles* of broadcasters, such as truth-telling, minimizing harm, independence, and accountability (Detenber, Cenite, Malik and Neo, 2012). The dependent variable, on the other hand, is *Public Image of Broadcasters* with four indicators: *prestige*, *integrity*, *competence*, and *non-routine job nature* (Lim, Teo, and See, 2000).

Five hypothesized models were developed since the main objective of this study was to find the best fit model for public image. A best fit model is one that meets the goodness of fit standard criterion statistics for structural models, which is shown below.

Goodness of Fit Standard Criterion Statistics for Structural Models

To identify the best fit model, all the values of the given indices must fall within each criterion.

Chi-square	large value
P value	>0.05
Chi Square/Degrees of Freedom (CMIN/DF)	<5
Normative Fit Index	>0.90
Comparative of Fit Index	>0.90
Goodness of Fit Index	>0.90
Tucker-Lewis Index	>0.90
Root Mean Square Error of Approximation (RMEA)	<0.05
P close	>0.50

The first hypothesized model is shown in figure 1. This model illustrates two assumptions: that there is a direct relationship between cultural intelligence and public image, and that the relationship between cultural intelligence and public image is mediated by journalistic function and ethical principles.

The second hypothesized model is shown in figure 2, which illustrates a direct influence of all three independent variables cultural intelligence, journalistic function, and ethical principles on public image.

The third hypothesized model (figure 3) shows the direct influence of cultural intelligence on public image.

Figure 4 shows the fourth hypothesized model illustrating the interrelationship of journalistic function and cultural intelligence and their direct influence on public image. While, figure 5 illustrates the assumption that there is direct influence of ethical principles on public image. Below are the said hypothesized models.

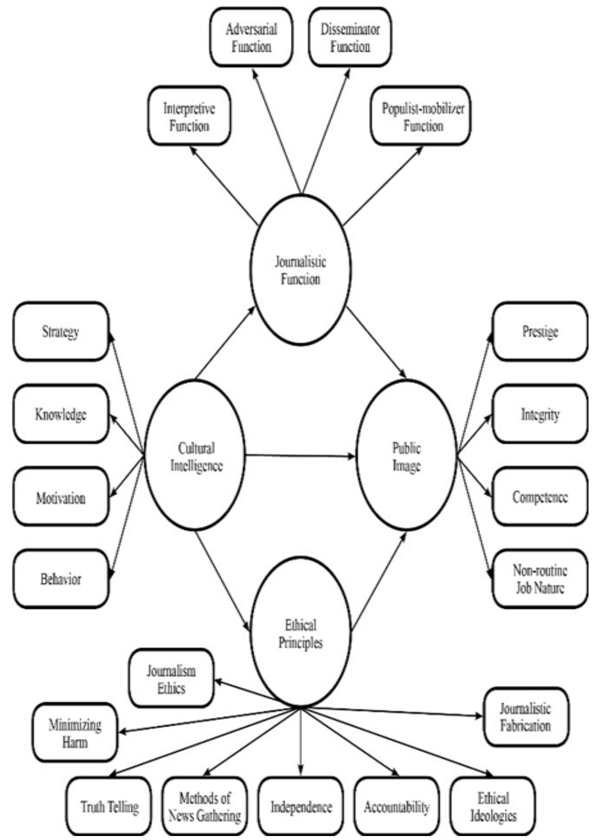

Figure 1. A Direct Influence of Cultural Intelligence and Public Image, and the Mediating Effect of Journalistic Function and Ethical Principles on Public Image

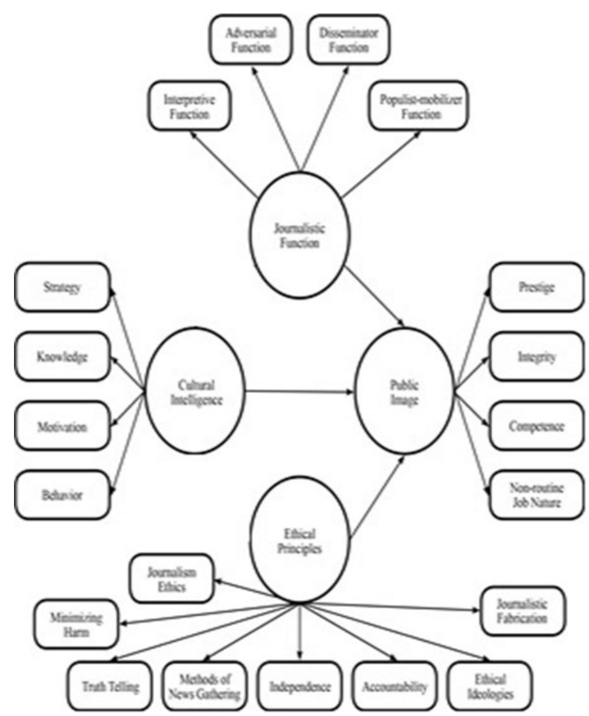

Figure 2. A Direct Influence of Cultural Intelligence, Journalistic Function, and Ethical Principles on Public Image

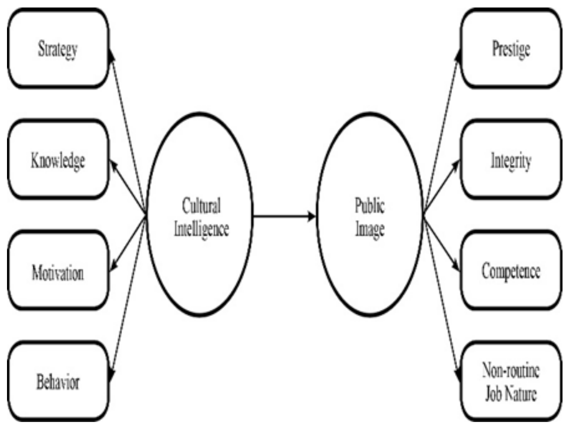

Figure 3. A Direct Influence of Cultural Intelligence on Public Image

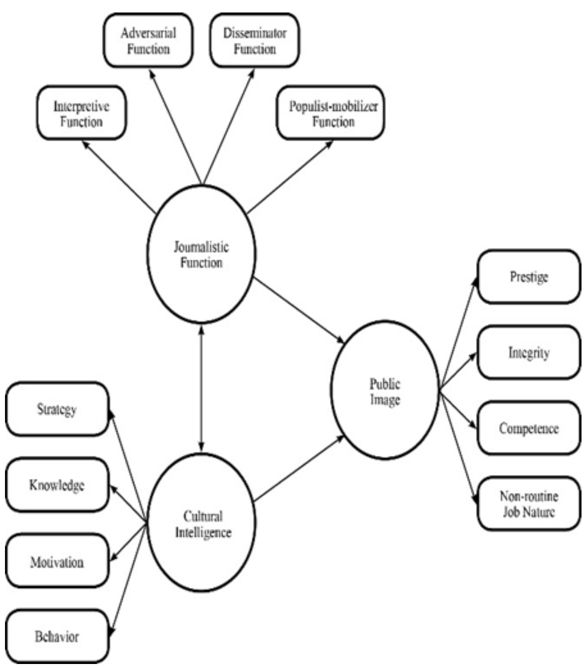

Figure 4. The Interrelationship of Journalistic Function and Cultural Intelligence and their Direct Influence on Public Image

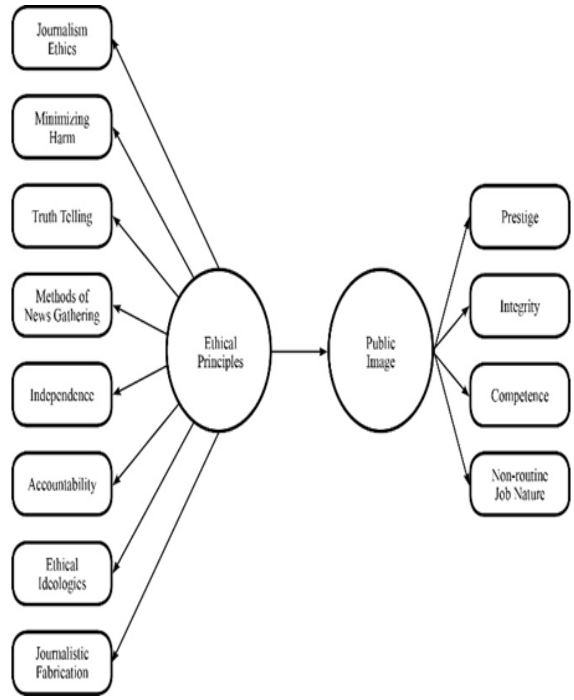

Figure 5. A Direct Influence of Ethical Principles on Public Image

METHOD

This study is a causal-comparative quantitative research that used: descriptive statistics, to describe the levels of the variables in the study, descriptive-correlation, to determine the significant relations between and among variables, regression modeling, to determine the independent variable with the most influence on the dependent variable, and structural equation modeling (SEM), to generate the best fit model for the public image of broadcasters.

There was a total of six hundred respondents of this study. One hundred radio listeners were taken from each of these cities in Davao Region: Davao City, Digos City, Island Garden City of Samal, Mati City, Panabo City, and Tagum City.

Survey questionnaires used were pilot-tested and subjected to item/content analysis using Cronbach's Alpha. The final questionnaire consisted of 31 items.

FINDINGS

Level of Cultural Intelligence, Journalistic Function, Ethical Principles, and the Public Image of Broadcasters in Region XI

Table 1 shows the overall result of the descriptive statistic for each variable. As could be seen in the table below that all results are high, which means that broadcasters always manifested cultural intelligence, journalistic function, and ethical principles in their broadcasting, and that people gave high regard to the public image of broadcasters.

TABLE 1. Level of Cultural Intelligence, Journalistic Function, Ethical Principles, and the Public Image of Broadcasters in Region XI

GVariables	SD	Mean	Descriptive Level
Cultural Intelligence	**0.59**	**3.56**	**High**
Journalistic Function	**0.54**	**3.61**	**High**
Ethical Principles	**0.74**	**3.42**	**High**
Public Image	**0.51**	**3.46**	**High**

In table 1 above, four variables are reflected. Three of these are the independent variables (cultural intelligence, journalistic function, and ethical principles), one is the dependent variable (public image).

Cultural Intelligence has four indicators, namely: *strategy*, which refers to the conscious knowledge of broadcasters in applying, adjusting and contextualizing their work to the culture of their audience; *knowledge*, which refers to the know-how of broadcasters insofar as their audience' socio-political and economic systems are concerned as well as the cultural values, religious beliefs, including the non-verbal systems of their audience; *motivation*, which refers to the feelings and emotions of the broadcasters while interacting with his audience; and *behavior*, which refers to the verbal and non-verbal behavior of the broadcaster when interacting with his audience (Ng, Van Dyne, and Ang, 2012).

Moreover, journalistic function also has four indicators also, namely: *interpretive function*, that refers to the broadcasters' provision of analysis and interpretation of the complex problems they are investigating; *adversarial function*, that refers to the skepticism expressed by broadcasters towards the public officials, business and corporations; *dissemination function*, that refers to the manner by which information is delivered by the broadcasters to the public; and *populist-mobilize function* that has something to do with developing intellectual and cultural interest among ordinary people (Yang and Arant, 2014).

The ethical principles of broadcasting pertains to *truth-telling*, which means that broadcasters are guided by truth when discussing and presenting issues; *minimizing harm* means that broadcasters should be guided by the principle of respect when writing stories and discussing issues; *independence*, which means that broadcasters should avoid conflicts of interest, real or perceived in the performance of his functions; *accountability,* which means that broadcasters should take responsibility for their words and actions; *ethical ideologies,* which pertains to the broadcasters' beliefs on idealism and relativism; *journalism ethics*, which means the necessity of broadcasters in having and observing ethical standards while exercising their profession; *methods of news gathering*, which refers to the exercise of the highest etiquette in performing journalistic duties; and *journalistic fabrication*, which refers to the making-up of stories just to make a report (Detenber, Cenite, Malik and Neo, 2012).

On the other hand, public image of broadcasters has the following indicators: *prestige*, referring to good opportunity and high esteem of broadcasters, *integrity*, referring to the reliability and trustworthiness of broadcasters, *competence*, referring to the adequate training of broadcasters, and *non-routine job nature,* that refers to the work of broadcasters other than being on air (Lim, Teo, and See, 2000).

The high levels of cultural intelligence, journalistic function, ethical principles, and public image suggest that listeners are highly appreciative of the way broadcasters perform their work. This means that broadcasters have often manifested the behaviors and actions indicated in this study, and that they have captured the expectations of the listeners insofar as cultural intelligence, journalistic function, and ethical principles of broadcasting are concerned.

Livermore (2009) and Pilon (2009) echoed that broadcasters who exhibit a good knowledge of the issue at hand and have shown respect of cultural norms and traditions of listeners while doing his radio program, will earn the respect and admiration of listeners thus building a high repute or a high level of public image. In other words, broadcasters who fail to follow the requisites of ethical broadcasting will not enjoy the appreciation of listeners and will likely not earn a good repute.

Significant Relationship between Cultural Intelligence, Journalistic Function, Ethical Principles, and the Public Image of Broadcasters

The data in table 2 shows the strength of the relationship between cultural intelligence and public image, journalistic function and public image, and ethical principles and public image. The overall scores revealed a strong positive relationship between the variables, which means that as the level of cultural intelligence, journalistic function, and ethical principles rise, the level of the public image of broadcasters also rises. The result implies the importance of building a very good work reputation to be able to build a good public image.

The result affirms the claim of Abu-Faraj (2012) that ethical principles and public image are correlates. Caroll and McCombs (2003) Ng, Van Dyne and Ang (2012) also claimed that broadcasters who can exhibit the above characteristics can surely gain a very high public image or repute.

TABLE 2. Significant Relationship Between Cultural Intelligence, Journalistic Function, Ethical Principles and Public Image of Broadcasters in Region XI

Variables	**Public Image of Broadcasters**				
	Prestige	Integrity	Competence	Non-routine Job Nature	**Overall**
Cultural Intelligence	.601** (.000)	.664** (.000)	.655** (.000)	.001 (.988)	.658** (.000)
Journalistic Function	.589** (.000)	.594** (.000)	.593** (.000)	.013 (.746)	.613** (.000)
Ethical Principles	.497** (.000)	.527** (.000)	.493** (.000)	.229** (.000)	.616** (.000)

In addition to the above claims, many research findings have been established underscoring the significant relationship between cultural intelligence and public image. For instance, Livermore (2011) found that executives across organizations with high cultural intelligence scores can negotiate and close contracts cross-culturally. The same finding was observed by Zielinski (2016) in tailoring market campaigns to diverse audiences. He found out that media personnel whose campaigns are culturally-sensitive were able to successfully appeal to diverse audiences. Importantly Ng, Van Dyne and Ang (2012) declared that cultural intelligence or cultural quotient consistently proved to be a predictor of trust and confidence among people in multicultural settings.

Moreover, Caroll and McCombs (2003) and Harshman, Gilsinan, Fisher and Yeager, (2005) posited that the way broadcasters and journalists carry out their journalistic functions determines their public image and the image of the corporation or organization they represent. In the context of journalism, Kunczik (2000) averred that ethical principles revolve around the question about what is good and what is right journalistically. Muñoz-Torres (2012) contended that objectivity, which is one of the ethical principles of broadcasting, is an ever-evolving, elusive concept and differently interpreted or valued depending on regions and cultures. This implies that a broadcaster should study and understand thoroughly the culture of the people where s/he has a radio program so that s/he can exercise objectivity based on cultural contexts.

Significant Influence of Cultural Intelligence, Journalistic Function, and Ethical Principles on the Public Image of Broadcasters

Presented in Table 3 are the regression coefficients for the combined influence of the cultural intelligence, journalistic function, and ethical principles on the public image of broadcasters in Region XI. Using the simple linear regression, the data showed an F-ratio of 201.654 that is significant at $p<0.001$. This p-value indicates that the regression model is significant.

Further, the R^2 value of 0.505 portents that 50.5 percent of the public image of broadcasters is influenced by the combination of cultural intelligence, journalistic function, and ethical principles.

TABLE 3. Significance of the Combined Influence of Cultural Intelligence, Journalistic Function and Ethical Principles on the Public Image of Broadcasters in Region XI

Public Image				
Variables	*B*	β	*t*	*Sig.*
Cultural Influence	.305	.358	8.083	.000
Journalistic Function	.168	.178	3.924	.000
Ethical Principles	.277	.261	6.277	.000
R	.711			
R^2	.505			
F	201.654			
p	.000			

Furthermore, among the three variables, *cultural influence* has the highest degree of influence on the public image of broadcasters as shown by a Beta value of .358. *Ethical principles* followed, with a Beta of .261 and lastly the *journalistic function*, with a Beta value of .178.

The result corroborates with the Lee's (2015) supposition that the public is very particular on how broadcasters function and that the public image of broadcasters, in the eyes of their audience and listeners, is defined by the way broadcasters function in their work. Lee asserted that the perception of the public about the journalistic functions of broadcasters mediate the relationship between broadcasters' activities and the audience perceptions of the media. In other words, the public is very particular on how broadcasters function and that the public image of broadcasters, in the eyes of their audience and listeners, is defined by the way broadcasters function in their work. Therefore, broadcasters who want to earn a very high level of public image should take note of this, without sacrificing the quality of news reporting based on ethical principles.

BEST FIT MODEL

Figure 6 presents the best fit model for the public image of broadcasters in Region XI. The figure shows that the journalistic function, such as interpretive function and populist-mobilize function are strong predictors for the public image of broadcasters. The direct effect of journalistic function on the public image of broadcasters is as much as .845 or 84.5%, as shown in Table 4.

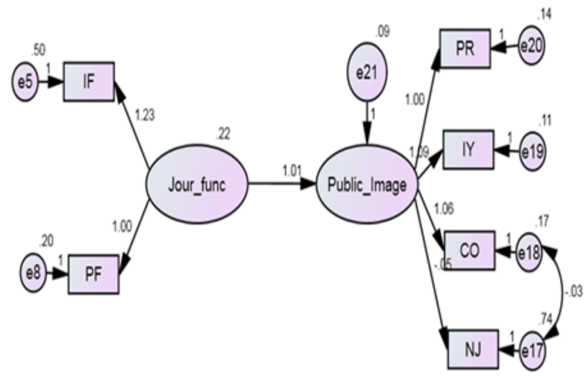

Figure 6. The Best Fit Model for Public Image

Legend:
Jour_func- Journalistic Function
PR - Prestige
IF - Interpretive Function
IY - Integrity
PF - Populist-mobilize Function
CO - Competence
Public_Image- Public Image
NJ - Non-Routine Job Nature

TABLE 4. Goodness of Fit Measures

INDEX	CRITERION	MODEL FIT VALUE
CMIN/DF	< 5	1.457
P-value	>0.05	.178
NFI	>0.95	.993
TLI	>0.95	.995
CFI	>0.95	.998
GFI	>0.95	.994
RMSEA	<0.05	.028
P-close	>0.05	.837

Legend:
CMIN/DF– *Chi-Square/Degrees of Freedom*
NFI – *Normed Fit Index*
TLI – Tucker-Lewis Index
CFI – Comparative Fit Index
GFI – *Goodness of Fit* Index
RMSEA– *Root Mean Square of Error Approximation*

Table 4 shows the generated model fit values that determine the best fit model based on criterion indices for goodness of fit. The calculation shows that the model, which is shown in *figure 6*, is the best fit model for public image since its chi-square of 1.457 and a probability of .178 have very satisfactorily satisfied the goodness of fit criteria. This is also strongly supported by RMSEA index which is less than 0.05, with its corresponding p-close value>0.05. It also shows that the other indices like NFI, TLI, CFI, and GFI are found to consistently indicate a very good fit model as their values all fall within each criterion.

Table five displays the regression weights estimated to measure the effects of the latent variables on the dependent variable. The Model (shown in figure 6), suggests that journalistic function is a strong predictor of public image as indicated by its beta of .845. On the other hand, the latent variable public image was found to be highly representative of the measured variables prestige, integrity, and competence with beta >.82, but not a representative of measured variable non-routine job nature which has a beta value of -.031.

This means that only two of the indicators of journalistic function, namely; interpretive function and populist-mobilize function can have a direct effect on the public image of broadcasters, specifically on the prestige, integrity, competence, and non-routine job nature of broadcasters. This means that broadcasters should be very conscious in carrying out their interpretive and populist-mobilize function if they aim to establish a very high public image. As stressed by Caroll and McCombs (2003) and Harshman, Gilsinan, Fisher and Yeager, (2005), the way that broadcasters perform their function can shape the perception of listeners about their public image.

TABLE 5. Direct and Indirect Effects of the Journalistic Function on Public Image as Reflected in the Best Fit Model

Variables	Direct Effect	Indirect Effect	Total Effect
Journalistic Function	.845		.845

CONCLUSION

There is a model for public image insofar as broadcasting is concerned. Listening to listeners and/or viewers' feedback is important to know what issues people would want to hear and how issues are being discussed. Journalistic functions, specifically interpretive and populist-mobilize functions, are important indicators in raising the public image of broadcasters. Listeners are willing to spend their time on broadcasts that are intellectually prepared as well as culturally sensitive. More importantly, people are willing to listen to broadcasters who are highly esteemed inside and outside the profession, trustworthy, and competent. If broadcasters will take note of these abstractions based on the findings of this study, then they will surely enjoy a very high public image.

RECOMMENDATIONS

The subsequent suggestions are derived from the findings and conclusions of the study.

Since it was found in the study that journalistic functions of broadcasters, particularly interpretive and populist-mobilize functions, are strong predictors of their public image given that it can influence public image by 85 percent, (and that broadcasters have only high levels on these functions), it is recommended that administrators of a media outfit should give intensive training of their people on these aspects of their work. Workshops on editorial, monitoring, programing, and media ethics are a must for them. Once broadcasters are well-trained in these parts of their job, they will always have a good number of listeners or audience share.

Moreover, the model derived from this study may be further studied using another design or other respondents. Or a replication of this study may be carried out in another region of the country to validate the findings of this study.

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GENDER MAINSTREAMING, GENDER MEASUREMENT, GENDER EMPOWERMENT AND GENDER EQUALITY AMONG THE COMPONENT CITIES IN REGION XI

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ABSTRACT

This study was a quantitative research intended to determine the best fit model of gender equality in the workplace. Particularly, it established the interrelationship among gender mainstreaming, gender measurement, gender empowerment, and gender equality. With the use of survey questionnaires, data were gathered from the city hall employees among selected cities in Davao Region, Philippines. Statistics used were: Pearson *r*, to determine the significance of the relationship between the independent and dependent variables; stepwise multiple regression analysis, to identify the variables that best predict gender equality in the workplace; and structural equation modeling, to identify the model that best fits gender equality. Findings of the study revealed that the overall level of gender measurement in the workplace among selected cities in Davao Region was very high. However, the overall level of gender mainstreaming, gender empowerment and gender equality were high only. Moreover, gender mainstreaming, gender measurement, and gender empowerment were highly correlated with gender equality and were also found to be significant predictors of gender equality in the workplace. Lastly, Hypothesized Model 4 was identified as the best fit model of gender equality in the workplace having passed all indices criteria of the goodness of fit.

Keywords: ***Public Administration*; *Structural Equation Modeling*; *Gender Measurement*; *Gender Mainstreaming*; *Gender Empowerment*; *Gender Equality*; *City Hall Employees in Davao Region*; *Philippines***

INTRODUCTION

Women around the world have not achieved equality with men in any country (Kelemen, 2015). Surveys have shown that women comprised 70% of the world's 1.3 billion poor people and between 75 and 80 percent of the world's 27 million refugees are women and children. In political participation, only 28 women have been elected heads of state or government in this century; 11.7 percent have been seated in the world parliaments and only seven women are among the 185 highest-ranking diplomats to the United Nations (Women's World Summit Foundation, 2015).

Gender equality is every person's right, but the sad fact is that the opposite is what is evident worldwide (Toutounji, 2013). Gender equality does not mean that women should be equal to men, but that women should be treated as equal to men about access to laws, policies and resources and services available within the family, community and society in general (Gender Equality in Ireland, 2015). Its importance is shown by the series and serious conduct of world conferences with the main objective of increasing the awareness of the world in closing the gender gap and empowering women to be equal with men in development (World Economic Forum, 2005).

However, despite rigorous efforts, gender equality remains elusive. As evidence to that, reports on education stated that two-thirds of the world's one billion illiterate adults are women. In like manner, two-thirds of the 130 million out of school children are girls. Regarding the labor sector, statistics show that in both developed and developing countries outside the agricultural sector, statistics show that in both developed and developing countries outside the agricultural sector, most women are paid less compared to men for the same work. In developing countries, women comprise 31 percent of the labor force and 46.7 percent worldwide. Rural women produce more than 55 percent of all food grown in developing countries but are not given their due. Around the world, 20 to 50 percent of women experience some degree of domestic violence during marriage. Also, the primary victims of wars today are the women and children. In some countries like Uganda, Armenia, Ghana, India, Indonesia and the Dominican Republic, among others, it was observed that wife beating is acceptable in case the wife argues with her husband. In like manner, the same countries also believe that wife beating is acceptable if a wife refuses to have sex with her husband (Women's World Summit Foundation, 2015).

Despite the presence of legal bases such as Magna Carta for Women, Article II, Section 14 of the 1987 Constitution, among others, that safeguards the implementation of gender equality in the Philippines, the following problems still exist: there were about 400,000 to 600,000 women and children being sold and traded as prostitutes not only in the Philippines but across Asia as well. In Davao City, it was estimated that around 6,000 women and children were involved in prostitution (Cascaro, 2012 September 25). This sex trade and trafficking exist because of the lack of employment opportunities, low income and inadequate educational opportunities for the poor and marginalized. The lack of economic empowerment for women also pushes the later to enter prostitution (American Civil liberties Union, 2015).

Given the above conditions, the researchers find the urgency to conduct this study to find out if such situations are still happening in the workplaces in the LGUs today.

STATEMENT OF THE PROBLEM

This study tried to determine the relationships, explore the differences, and investigate the influence of gender measurement, gender mainstreaming, and gender empowerment on gender equality among the component cities in Region XI. It sought answers to the following questions:

1. What is the level of gender mainstreaming, gender measurement, gender empowerment and gender equality in the workplace among the component cities in Region XI?

2. Is there a significant relationship between gender measurement and gender equality; gender mainstreaming and gender equality, and gender empowerment and gender equality in the workplace among the component cities in Region XI.
3. Is there a significant influence of gender measurement, gender mainstreaming, and gender empowerment, on gender equality in the workplace among the component cities in Region XI, both in their singular and collective capacity?

4. Which among the hypothesized models is the best fit model for gender equality in the workplace?

Hypothesis

Null hypotheses in this study were tested at $\alpha=0.05$ levels of significance.

1. No significant relationship exists between gender measurement and gender equality; gender mainstreaming and gender equality, and gender empowerment and gender equality.
2. There is no significant influence of the exogenous variables (gender measurement, gender mainstreaming and gender empowerment) on gender equality, whether singly or in their collective capacity.
3. There is no best fit model of gender equality.

CONCEPTUAL FRAMEWORK

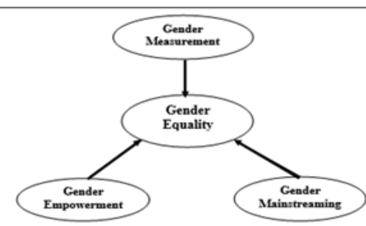

Figure 1. Structural Equation Model

Indicators of Gender Measurement:
- Gender Roles
- Gender Belief
- Gender Principles

Indicators of Gender Mainstreaming:
- Organizational Culture
- Recruitment/Solution/Recognition
- Partner and Staff Capacity Development
- Communications, Awareness and Promotion
- Project Development and Execution
- Policies

Indicators of Gender Equality
- Corporate mission and values
- Staff recruitment and selection
- Lifelong learning
- Salaries & career management
- Social dialogue & participation
- Obligation to respect the dignity
- Information, communication & image
- Conciliation between professional & family
- Direct benefits of male and female
- Direct benefits for relatives
- Maternity & Paternity protection

Indicators of Gender Empowerment
- Leadership promotes gender equality
- Equal Opportunity
- Health, safety & freedom from violence
- Education and training
- Enterprise development & marketing practices
- Community leadership & engagement
- Transparency, measuring & reporting

Figure 1. A Conceptual Model of the Study Showing a Direct Causal Relationship of Gender Mainstreaming, Gender Measurement, Gender Empowerment on Gender Equality

This study used the structural equation modeling to show variations and relationships. In this study, the independent variables are Gender Measurement, Gender Mainstreaming (Catacutan and Valencia, 2013; UNICEF 2007), and Gender Empowerment in the workplace (Philippine Commission on Women, 2009). The dependent variable is gender equality, as reflected by the circle at the center of the diagram.

Gender measurement is indicated by gender roles, gender belief and gender principles, while gender mainstreaming is indicated by organizational culture, recruitment/solution/recognition, partner and staff capacity development, communications, awareness and promotion, project development and execution, and policies. Gender empowerment is indicated by leadership promotes gender equality, equal opportunity, health, safety & freedom from violence, education and training, enterprise development & marketing practices, community leadership & engagement, and transparency, measuring & reporting.

Whereas, gender equality is indicated by equality in corporate mission and values, staff recruitment and selection, lifelong learning, salaries & career management, social dialogue & participation, obligation to respect the dignity, information

METHOD

This is a quantitative study that wished to prove or disprove a hypothesis by statistical means. Particularly, this research used descriptive -correlation design with survey questionnaires as a tool in gathering the needed data. The method was seen appropriate for this study because the problem entailed describing and ascertaining relationships that exist among variables. Since there were three independent variables: gender mainstreaming, gender measurement, gender empowerment, so a Regression Analysis was used to determine which indicator in the variables best predicts gender equality.

Moreover, this study also used Structural Equation Modeling (SEM) (Dell Inc., 2015) to illustrate, describe, and define the relationship of variables in the study. It assessed the direct and indirect relationships between the independent variables and the dependent variable as well as the interrelationships among the independent variables, all at the same time (Schneider, Hommel, and Blettner, 2010).

In determining the sample size, quota sampling (Changing Minds, 2015) was used so that the same number of population could be taken from each component city. The quota was pegged at 125 samples per city, so that the total number of samples was 500. This number could already give a more meaningful result at 95% confidence level, with a ±5% margin of error (Creative Research Systems, 2012; Niles, 2017). The sample population was broken down into smaller groups, by department in the city government of each of the component city. This was to ascertain that representative samples are obtained for each department of the city government to prevent skewed results that may result from either overrepresentation or underrepresentation of samples (Investopedia, 2015; Explorable, 2015).

Research Instruments

Adapted survey instruments were utilized in the gathering of data for this study. Questionnaires were sourced from the following: Catacutan and Valencia (2013) for gender mainstreaming; Prasad and Baron (1996) for gender measurement; Philippine Commission for Women (2009) for gender empowerment; and the United Nations (2015) for gender equality. These questionnaires were subjected to a validity and reliability testing using Cronbach's Alpha. All items with alpha lesser than .70 were left out in the final list of items. In addition, items in the questionnaires were also validated by a group of experts in the field of public administration and research.
Respondents were given 5 options to choose from in answering the questionnaire. The number would describe the degree or level of agreement/ disagreement of the respondent to the statement in the questionnaire: 5 for strongly agree, 4 for agree, 3 for neither agree nor disagree, 2 for disagree, and 5 for strongly disagree.

FINDINGS

Levels of Gender Measurement, Gender Mainstreaming, Gender Empowerment, and Gender Equality among the Component Cities in Region XI

Table 1 displays the data on the level of gender measurement, gender mainstreaming, gender empowerment, and gender equality among the component cities in Region XI. The means scores revealed that only gender measurement has a very high level among the variables measured. The rest got high levels only.

The very high result for gender measurement showed that respondents were convinced that gender beliefs, gender roles and gender principles (which are indicators of gender measurement) are bolstered in their workplaces. They were convinced that their men and women colleagues are rational and are all capable of working outside of their homes. Aside from that, they were convinced that family matters should be the concern of both the man and the woman, and that in terms of education, men and women should have equal access to it. They also though that men and women deserve the same amount of respect, and that boys and girls should have equal opportunities and should be treated the same way. They agreed, based on their responses to the questionnaire, that raising children should be founded on a non-sexist orientation, both at home and at school. And in government jobs, they thought that men and women should have an equal number of population quota and equal opportunities, notwithstanding their personal preferences and interests.

Table 1.
Level of Gender Measurement, Gender Mainstreaming, Gender Empowerment, and Gender Equality among the Component Cities in Region XI

Variable	SD	Mean	Descriptive Level
Gender Measurement	0.40	4.32	Very High
Gender Mainstreaming	0.56	4.00	High
Gender Empowerment	0.62	3.97	High
Gender Equality	0.60	3.93	High

On the other hand, the high result for gender mainstreaming means that the respondents oftentimes manifest their desire to be in an office that pays so much attention in ensuring respectful relations between men and women and the desire to have an effective means to do so, and that they also oftentimes manifest their desire to be in an office where management equally recognizes the contributions of both men and women to the organization. They believe that gender equity should be part of the vision, mission, and goals of the organization and that active policy on gender equality and respect for diversity in decision-making, behavior, work ethics, information, and etcetera should be upheld. Not only these, but the respondents also desire to have an office that offers enough opportunities for capacity building to strengthen their knowledge of gender issues within their professional or technical area.

Moreover, the high level of gender empowerment means that the respondents still manifested their desire to be empowered in some respects like in decision making and leadership. The result the desire of the employees to be given equal opportunities both in the health, safety & freedom from violence as well as the leadership aspect.

As for gender equality, the level is high only. Of the eleven indicators of gender equality, only *salaries and career management* got a very high mean score, while the rest were high mean scores only. This means that the respondents agreed that men and women are receiving standard rates of salaries because of the standardized salaries and wages imposed by the government. Even in the management of careers in their workplaces, the respondents also agree that the principle of equality and non-discrimination is always applied when appointing a male or female employee for a leadership position. Likewise, in the promotion and career progress, women and men are promoted based on qualifications. They also agree that the performance assessment in their office is based on common criteria, without favoring or discriminating any gender. Importantly, they agreed that in the observance of gender equality in their workplace, their office has protocols with family support services as well as child care facilities for the children of both male and female employees, financial support for child care services and for health purposes.

Significance of the Relationship between Gender Measurement and Gender Equality; Gender Mainstreaming and Gender Equality; and Gender Empowerment and Gender Equality among the Component Cities in Region XI

The result of the correlation test between gender measurement and gender equality is shown in Table 2. The overall result showed the significance of the relationship of the two variables given that the overall coefficient of correlation is .335 with a p-value of .000. This means that the hypothesis of no significant relationship should be dismissed.

Table 2
Significance of the Relationship between Gender Measurement and Gender Equality among the Component Cities in Region XI

Gender Measurement	CMV	SRS	LL	SCM	SDP	ORD	ICI	CBPF	DBM	DBR	MPP	Overall
	Gender Equality											
GR	.331** (.000)	.273** (.000)	.315** (.000)	.261** (.000)	.258** (.000)	.205** (.000)	.275** (.000)	.221** (.000)	.251** (.000)	.201** (.000)	.190** (.000)	**.325** (.000)**
GB	.189** (.000)	.151** (.003)	.209** (.000)	.195** (.000)	.138** (.006)	.137** (.006)	.176** (.000)	.147** (.003)	.154** (.002)	.085 (.090)	.142** (.004)	**.200** (.000)**
GP	.275** (.000)	.211** (.000)	.260** (.000)	.165** (.001)	.238** (.000)	.280** (.000)	.303** (.000)	.259** (.000)	.170** (.001)	.159** (.001)	.118** (.018)	**.287** (.000)**
Overall	**.328** (.000)**	**.262** (.000)**	**.324** (.000)**	**.258** (.000)**	**.261** (.000)**	**.254** (.000)**	**.310** (.000)**	**.257** (.000)**	**.238** (.000)**	**.183** (.000)**	**.187** (.000)**	.335** (.000)

**p<.001
Legend:
GR = Gender Role
GB = Gender Beliefs
GP = Gender Principles
CMV = Corporate Mission & Values
SRS = Staff Recruitment & Selection
LL = Lifelong Learning
SCM = Salaries & Career Management
SDP = Social Dialogue and Participation
ORD = Obligation to Respect the Dignity
ICI = Information, Communication & Image
CBPF = Conciliation Between Professional, Family and Personal Life
DBM = Direct Benefits of Male and Female Workers
DBR = Direct Benefits for Relatives
MPP = Maternity and Paternity Protection

A scrutiny of the data showed that all indicators of gender measurement (GM) are significantly correlated with gender equality. Gender role (GR), when correlated with gender equality yielded a coefficient of .325 with p<.001; when gender beliefs (GB) was correlated with gender equality, it yielded a coefficient of .200 with a p-value of .000. Similarly, when gender principle (GP) was correlated with gender equality, it yielded a coefficient of .287 with a .000 p-value.

To examine the data further, it could be seen that all three indicators of gender measurement have an overall p-values of .000; and all 11 indicators of gender equality have .000 p-values, which indicate a reciprocal relationship between the two variables.

The reciprocity of relationship of variables means that each variable has a role to play in the balancing and stabilizing the relationship. In the context of this study, reciprocal relationship means that when gender measurement is established in the workplace, gender equality is likewise established, or vice-versa.

The result implies the significance of properly defining, qualifying, and upholding gender roles, gender beliefs and gender principles vis-à-vis corporate mission & values, staff recruitment & selection, lifelong learning, salaries & career management, social dialogue and participation, obligation to respect the dignity, information, communication & image, conciliation between professional, family and personal life, direct benefits for relatives, direct benefits of male and female workers, and maternity and paternity protection for gender equality in the workplace to happen.

Table 3 reflects the correlation data between gender mainstreaming and gender equality. The overall correlation coefficient of .774 with p-value .000 implies significance of the relationship between gender mainstreaming and gender equality. Moreover, when the relationship of each indicator was tested, it was found out that indicators of gender mainstreaming and gender equality are all significantly correlated. The correlation test between organizational culture (OC) and gender equality generated a coefficient of .541 (p<.001); Recruitment / Selection / Retention /Recognition and gender equality, .562 (p<.001); partners & staff capacity development and gender equality, .650 (p<.001); communication/awareness & promotion and gender equality, .690 (p<.001); project development & execution, .684 (p<.001); and policies, .716 (p<.001).

The coefficients of correlation reveal that the relationships between these variables are positive and significant. It should be noted that tell the robustness of the relationship between two variables. So, building upon that premise, it could be inferred that gender mainstreaming and gender equality have a strong positive association as evidenced by an overall correlation coefficient of .774, which is significant at p<.001. In other words, these two variables are in tandem.

Table 3
Significance of the Relationship between Gender Mainstreaming and Gender Equality among the Component Cities in Region XI

Gender Mainstreaming	CMV	SRS	LL	SCM	SDP	ORD	ICI	CBPF	DBM	DBR	MPP	Overall
	Gender Equality											
OC	.371** (.000)	.381** (.000)	.425** (.000)	.349** (.000)	.381** (.000)	.403** (.000)	.406** (.000)	.288** (.000)	.332** (.000)	.245** (.000)	.276** (.000)	.541** (.000)
RSR	.510** (.000)	.546** (.000)	.541** (.000)	.370** (.000)	.434** (.000)	.387** (.000)	.454** (.000)	.363** (.000)	.461** (.000)	.350** (.000)	.372** (.000)	.562** (.000)
PSCD	.591** (.000)	.560** (.000)	.556** (.000)	.365** (.000)	.526** (.000)	.459** (.000)	.540** (.000)	.433** (.000)	.518** (.000)	.517** (.000)	.430** (.000)	.650** (.000)
CAP	.645** (.000)	.629** (.000)	.609** (.000)	.432** (.000)	.557** (.000)	.491** (.000)	.534** (.000)	.466** (.000)	.523** (.000)	.494** (.000)	.474** (.000)	.690** (.000)
PDE	.635** (.000)	.618** (.000)	.594** (.000)	.347** (.000)	.568** (.000)	.463** (.000)	.572** (.000)	.505** (.000)	.514** (.000)	.517** (.000)	.455** (.000)	.684** (.000)
PO	.693** (.000)	.642** (.000)	.634** (.000)	.424** (.000)	.572** (.000)	.519** (.000)	.584** (.000)	.454** (.000)	.535** (.000)	.530** (.000)	.484** (.000)	.716** (.000)
Overall	.712** (.000)	.697** (.000)	.691** (.000)	.468** (.000)	.626** (.000)	.558** (.000)	.636** (.000)	.518** (.000)	.594** (.000)	.550** (.000)	.514** (.000)	.774** (.000)

**p<.001
Legend:
OC = Organizational Culture
RSR = Recruitment/Selection/Retention/Recognition
PSCD = Partners & Staff Capacity Development
CAP = Communication/Awareness & Promotion
PDE = Project Development & Execution
PO = Policies
CMV = Corporate Mission & Values
SRS = Staff Recruitment & Selection
LL = Lifelong Learning
SCM = Salaries & Career Management
SDP = Social Dialogue and Participation
ORD = Obligation to Respect the Dignity
ICI = Information, Communication & Image
CBPF = Conciliation Between Professional, Family and Personal Life
DBM = Direct Benefits of Male and Female Workers
DBR = Direct Benefits for Relatives
MPP = Maternity and Paternity Protection

Table 4 shows the correlation data between gender empowerment and gender equality. The data set revealed that gender empowerment and gender equality have a very strong positive association given the correlation coefficient of .867. Not only that, the association is also significant at p<.001. The result rejected the hypothesis of no significant relationship.

In scrutinizing the data to find out where the strength of correlation of the two variables was derived, it was found that all indicators of gender empowerment are strongly and positively correlated with all indicators of gender equality. These are the coefficients of correlation between the indicators of gender empowerment and gender equality: between Leadership Promotes Gender Equality (LPGE) and gender equality, the R is .701; between Equal Opportunity Inclusion & Non-Discrimination (EOI) and gender equality, R is .737; between Health, Safety & Freedom from Violence (HSFV) and gender equality, R is .690; Education and Training (ET) and gender equality, R is .722; between Enterprise Development, Supply Chain (EDSM) and gender equality, R is .727; between Community Leadership and Engagement (CLE) and gender equality, R is .805, and between Transparency, Measuring and Reporting (TMR), R is .792. All coefficients of correlation (R) are significant at p<.001.

The data imply that each of the indicators of gender empowerment has a significantly strong and positive association with any of the indicators of gender equality. This means a locked-in relationship between these two variables, that, every rise in the level of gender empowerment would give rise to the level of gender equality.

Table 4
Significance of the Relationship between Gender Empowerment and Gender Equality among the Component Cities in Region XI

Gender Empowerment	Gender Equality											
	CMV	SRS	LL	SCM	SDP	ORD	ICI	CBPF	DBM	DBR	MPP	Overall
LPGE	.653** (.000)	.552** (.000)	.628** (.000)	.522** (.000)	.601** (.000)	.555** (.000)	.583*** (.000)	.438** (.000)	.543** (.000)	.471** (.000)	.419** (.000)	.701** (.000)
EOI	.669** (.000)	.615** (.000)	.670** (.000)	.539** (.000)	.618** (.000)	.542** (.000)	.623** (.000)	.479** (.000)	.569** (.000)	.474** (.000)	.483** (.000)	.737** (.000)
HSFV	.658** (.000)	.581** (.000)	.641** (.000)	.545** (.000)	.543** (.000)	.576** (.000)	.581** (.000)	.373** (.000)	.540** (.000)	.437** (.000)	.426** (.000)	.690** (.000)
ET	.680** (.000)	.644** (.000)	.682** (.000)	.488** (.000)	.597** (.000)	.515** (.000)	.579** (.000)	.465** (.000)	.532** (.000)	.516** (.000)	.438** (.000)	.722** (.000)
EDSM	.640** (.000)	.606** (.000)	.671** (.000)	.514** (.000)	.615** (.000)	.553** (.000)	.622** (.000)	.502** (.000)	.522** (.000)	.483** (.000)	.458** (.000)	.727** (.000)
CLE	.730** (.000)	.657** (.000)	.705** (.000)	.536** (.000)	.685** (.000)	.592** (.000)	.689** (.000)	.568** (.000)	.589** (.000)	.569** (.000)	.509** (.000)	.805** (.000)
TMR	.753** (.000)	.664** (.000)	.632** (.000)	.486** (.000)	.660** (.000)	.596** (.000)	.723** (.000)	.565** (.000)	.554** (.000)	.564** (.000)	.518** (.000)	.792** (.000)
Overall	.800** (.000)	.723** (.000)	.774** (.000)	.605** (.000)	.726** (.000)	.656** (.000)	.737** (.000)	.575** (.000)	.642** (.000)	.593** (.000)	.543** (.000)	.867** (.000)

**p<.001

Legend:

LPGE = Leadership Promotes
EOI = Equal Opportunity Inclusion & Non-Discrimination
HSFV = Health, Safety & Freedom from violence
ET = Education & Training
EDSM = Enterprise Development, Supply Chain
CLE = Community Leadership & Engagement
TMR = Transparency, Measuring & Reporting
CMV = Corporate Mission & Values
SRS = Staff Recruitment & Selection
SCM = Salaries & Career Management
SDP = Social Dialogue and Participation
ORD = Obligation to Respect the Dignity
ICI = Information, Communication & Image
CBPF = Conciliation Between Professional, Family and Personal Life
DBM = Direct Benefits of Male and Female Workers
DBR = Direct Benefits for Relatives
MPP = Maternity and Paternity Protection

Significance of the Influence of Gender Measurement, Gender Mainstreaming, and Gender Empowerment on Gender Equality

The significance of the influence of the predictor variables over gender equality was measured using the Multiple Regression Analysis. Displayed in Table 5 are the data of the regression analysis that measured the extent of influence of gender measurement on gender equality. Of the three indicator of gender measurement, only two are found to be significant predictors of gender equality: gender role and gender principles.

The analysis shows that the standardized regression coefficient of gender principles is .071, while the standard coefficient of gender role is .066. The standardized regression coefficients (β) indicate the highest degree of influence that gender principles and gender role have on gender equality. Moreover, the F-value of 20.040 with a corresponding ρ-value of .000 indicates that the regression model is significant. Therefore the hypothesis of no significant influence is rejected. In other words, there is a variable of gender measurement that can influence gender equality.

As seen in the Table 5, all beta coefficients of gender role and gender principles are positive (β > 0) and significant (p=.000). This means that the two indicators significantly contribute to the variations in gender equality. This is manifested in the regression analysis where R^2 is .132. This means that the two variables can explain only 13.2 percent of the variance and that 86.8 percent of the variance can be attributed to other factors that are not included in this study like economics and the different valuation of men and women, education, leadership, etc. (UNDP, 2016).

Table 5
Significance of the Influence of Gender Measurement on Gender Equality

		Gender Equality			
Gender Measurement		*B*	β	*t*	*Sig.*
Gender Role		.299	.066	4.518	.000
Gender Beliefs		-.011	.066	-.163	.871
Gender Principles		.233	.071	3.278	.001
		R	.363		
		R^2	.132		
		F	20.040		
		ρ	.000		

Table 6 presents the regression analysis on the influence of gender mainstreaming on gender equality. There are six indicators of gender mainstreaming, namely; organizational culture, recruitment/ selection/retention/recognition, partners & staff capacity development, communication/ awareness and promotion, project development, and policies. However, of these six indicators, only four are seen to have the capacity to influence gender equality. The standardized regression coefficients (β) with corresponding p-values that are lesser than the set p-value of .05 in this study show that these indicators are predictors of gender equality. These four indicators are recruitment/ selection/retention/ recognition with a beta coefficient of .105 and a corresponding p-value of .017; communication/awareness and promotion, with a p-value of .004; project development with a beta coefficient of .170 and a p-value of .002; and policies with a beta coefficient of .309 and a p-value of .000. This means that these four indicators can contribute to the variance of gender equality. Further, the coefficient of determination (R^2) tells the extent or percentage by which these indicators can contribute to the variance.

In the data, F-value of 103.260 with a corresponding p-value of .000 indicates that the regression model is significant and that the null hypothesis should be rejected. This conveys that indeed, there is a variable of gender mainstreaming that could explain the variance in gender equality. Moreover, the data shows that the coefficient of determination is .612, which means that these four indicators can explain the variance in gender equality by 61.2 percent.

Table 6
Significance of the Influence of Gender Mainstreaming on Gender Equality

	Gender Equality			
Gender Mainstreaming	*B*	β	*t*	*Sig.*
Organizational Culture	.087	.084	2.214	.027
Recruitment/Selection/Ret./Recognition	.097	.105	2.406	.017
Partners & Staff Capacity Development	.083	.096	1.827	.068
Communication/Awareness & Promotion	.146	.166	2.868	.004
Project Development	.140	.170	3.057	.002
Policies	.256	.309	5.828	.000
	R	.782		
	R^2	.612		
	F	103.260		
	ρ	.000		

Table 7 shows the regression analysis on the influence of gender empowerment on gender equality. There are seven indicators of gender empowerment. These are: leadership promotes gender equality; equal opportunity health; safety and freedom from violence; education and training; enterprise development; community leadership; and transparency, measuring & reporting. However, only four of these indicators are found to influence gender equality.

Indicators of gender empowerment with standardized regression coefficients (β) having corresponding p-values that are lesser than the set p-value of 0.05 convey that these indicators can contribute to the variance in gender equality. Looking closely at the data, equal opportunity has a standardized beta coefficient (β) of .161 with a p -value of .000; education and training has a β of .103 with a p-value of .012; community leadership has a β of .046 with a corresponding p-value of .000; and transparency, measuring and reporting has a β of .302 with a p-value of .000.

The data further revealed F-value of 194.351 with a corresponding p-value of .000 indicates that the regression model is significant and therefore the null hypothesis should be rejected. Furthermore, the coefficient of determination (R^2) of .777 conveys that the four indicators, equal opportunity, education and training, community leadership, and transparency, measuring and reporting can explain the variance in gender equality by 77.7 percent. The rest of the 22.3 percent of the variance in gender equality can be explained by other factors not covered in this study like gender and development efforts (Phil. Commission on Women, 2009), among others.

Table 7
Significance of the Influence of Gender Empowerment on Gender Equality

	Gender Equality			
Gender empowerment	*B*	β	*t*	*Sig.*
Leadership Promotes Gender Equality	.058	.067	1.696	.091
Equal Opportunity	.145	.161	3.897	.000
Health, Safety & Freedom from Violence	.060	.064	1.564	.119
Education & Training	.083	.103	2.518	.012
Enterprise Development	.037	.046	1.058	.291
Community Leadership	.213	.273	5.976	.000
Transparency, Measuring & Reporting	.224	.302	7.667	.000
	R	.881		
	R^2	.777		
	F	194.351		
	ρ	.000		

Significance of the Combined Influence of Gender Measurement, Gender Mainstreaming and Gender Empowerment on Gender Equality

The regression analysis on the combined influence of the predictor variables on gender equality is presented in Table 8. There are three predictor variables in this study, namely; *gender measurement, gender mainstreaming*, and *gender empowerment* and one of the objectives of this study was to find which of the predictor variables can best predict the variance in the dependent variable, which is gender equality.

The data revealed that among the three predictor variables, only two are revealed to be predictors of gender equality. These are: Gender empowerment, with a beta coefficient of .712 and a corresponding p-value of .000; and gender mainstreaming, with a beta coefficient of .196 and a corresponding p-value of .000.

Moreover, the data also revealed an F-value of 425.521 and a p-value of .000 which indicates a model fit. In other words, gender empowerment and gender mainstreaming are can predict gender equality. The regression model further revealed that these two predictor variables can influence gender equality by 76.3 percent as indicated by the R^2 value of .763.

This means further that both gender empowerment and gender mainstreaming can explain the variance in gender equality by as high as 76.3 percent. Considering the very high percentage of influence that the two predictor variables can have over gender equality, the implication is that gender equality can be achieved if both gender empowerment and gender mainstreaming are observed and upheld in the workplace. Rejecting these variables in the workplace can lead to gender inequality.

Table 8
Significance on the Combined Influence on Gender Equality in the Workplace among the Four Components Cities in Region XI

(Variables)	Gender Equality B	β	t	Sig.
Gender Measurement	-.027	-.018	-.651	.516
Gender Mainstreaming	.213	.196	4.449	.000
Gender empowerment	.689	.712	16.603	.000
	R	.874		
	R^2	.763		
	F	425.521		
	ρ	.000		

Establishing the Best Structural Model

This section of the paper provides the analysis on the interrelationships among the variables of the study. Four alternative models were tested so that the best fit model of gender equality can be achieved. Each model that was tested had two separate model frameworks: a measurement model, and a structural model. It is the measurement model that represents the measure loads on each factor to their latent constructs, while it is the structural model that defines the relationships among the latent variables. Moreover, the assessment of the model fit becomes the basis of whether to accept or reject the hypothesis. The general aim of this study, however, is to establish the relationship between the exogenous and endogenous variables stipulated in this study, as well as the causality of the relationship of the latent variables towards the other latent variables.

The Structural Equation Modeling Analysis is guided by certain parameters referred to as estimates. These parameter estimates indicate the magnitude and direction of the relationships among the variables. A model fit is one in which all the parameter estimates have been satisfactorily satisfied. By the way, the generated models other than the best fit model are appended in this paper.

Direct and Indirect Effects of the Independent Variables on Gender Equality of Model 4

Table 9 shows the direct and indirect effects of gender mainstreaming and gender empowerment on gender equality. Of the two variables tested for both direct and indirect effects on gender equality, only *gender empowerment* is known to have a *direct effect* on gender equality as indicated by a coefficient of .980. This is also the magnitude of the total direct effect of gender empowerment on gender equality as there is no other effect that is noted. On the other hand, an indirect effect of gender mainstreaming upon gender equality is noted, with a coefficient of .917. This is also the total magnitude of indirect effect that gender mainstreaming has on gender equality.

Table 9
Direct and Indirect Effects of the Independent Variables on Gender Equality of Model 4

	Gender Equality		
Independent Variables	Direct Effect	Indirect Effect	Total Effect
Gender Mainstreaming	.000	.917	.917
Gender empowerment	.980	.000	.980

Goodness of Fit Measures Generated Model 4

The goodness of fit indices is presented in Table 10. These indices are the basis of the model fitting in this study. The data in Table 10 revealed a highly acceptable model fit since all the model fit values fall within each of the set criterion.

The chi-square divided by the degrees of freedom yielded a 2.082 model fit value with a probability value of .083, which is well beyond the criterion of p>0.05. This indicates a very good model fit to the data. The RMSEA index also strongly supported this model having obtained a .042 index (criterion: < 0.05), with a corresponding pclose value of >0.05.

Moreover, indices such as those of the Normed Fit Index (NFI), .976; Goodness of Fit Index (GFI), .967; Tucker-Lewis Index (TLI), .981; and Comparative Fit Index (CFI), .987 are all consistent with the criterion set for them, which again indicated a very good model fit.

Further, the regression weights suggest that gender empowerment is a strong predictor of gender equality as evidenced by its beta .980 with its corresponding p-value of less than .001. It was also found out that the latent variable, gender empowerment, is also found to have a reasonable representative of the measured variable, Transparency, Measuring & Reporting (B=.821); Enterprise Development, Supply Chain & Marketing Practices (B=.792); Education and Training (B=.810); Equal Opportunity (B=.841); and Leadership Promotes Gender Equality (B=.851). All probability levels of these variables are less than .001. Regression weights are presented in Table 11.

Table 10
Goodness of Fit Measures Generated Model 4

INDEX	CRITERION	MODEL FIT VALUE
CMIN/DF	< 5	2.082
P-value	>0.05	.083
NFI	>0.95	.976
TLI	>0.95	.981
CFI	>0.95	.987
GFI	>0.95	.967
RMSEA	<0.05	.042
P-close	>0.05	.395

Legend: CMIN/DF–*Chi Square/Degrees of Freedom*
GFI– *Goodness of Fit Index*
RMSEA– *Root Mean Square of Error Approximation*
NFI– *Normed Fit Index*
TLI– *Tucker-Lewis Index*
CFI–*Comparative Fit Index*

Table 11
Estimates of Variable Regression Weights in Generated Model 4

			Estimate	S.E.	Beta	C.R.	P-value
G-EMPO	<---	G_MAIN	.986	.054	.935	18.108	.000
G_EQUA	<---	G-EMPO	.913	.046	.980	19.852	.000
PO	<---	G_MAIN	1.000		.870		
CA	<---	G_MAIN	.903	.043	.834	20.757	.000
PS	<---	G_MAIN	.878	.048	.794	18.403	.000
OC	<---	G_MAIN	.451	.045	.488	10.060	.000
TM	<---	G-EMPO	1.000		.821		
ED	<---	G-EMPO	.895	.049	.792	18.272	.000
ET	<---	G-EMPO	.906	.048	.810	18.904	.000
EO	<---	G-EMPO	.846	.045	.841	18.667	.000
LP	<---	G-EMPO	.836	.045	.807	18.772	.000
CM	<---	G_EQUA	1.000		.854		
MP	<---	G_EQUA	.731	.058	.591	12.619	.000

Legend:

G_MAIN=*Gender Mainstreaming*
OC=*Organizational Culture*
PS=*Partners & Staff Capacity Development*
CA=*Communication/Awareness & Promotion*
PO=*Policies*
G_EQUA
CM – Corporate Mission and Values
MP - Maternity & Paternity Protection and Family Assistance

G_EMPO
LP=*Leadership Promotes Gender Equality*
EO=*Equal Opportunity, Inclusion & Non-Discrimination*
ET=*Education & Training*
ED=*Enterprise Development, Supply Chain & Marketing Practices*
TM=*Transparency, Measuring & Reporting*

Model Development

One of the objectives of this study was to find the best fit model for gender equality. There were four models generated out of the proposed model in Figure 1 of which their summary is presented in Table 15.

To identify the best fit model, all indices must be consistent with the acceptable ranges. First, the Chi-square/degrees of freedom (CMIN/DF) value should be less than 5 with its corresponding p-value greater or equal to 0.05. Second, the Root Mean Square of Error Approximation (RMSEA) value must be less than 0.05 and its corresponding pclose value must be greater or equal to 0.05. The other indices such a Normed Fit Index (NFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI) and Goodness of Fit (GFI) must be all greater than 0.95.

The first structural model that was generated showed the direct causal relationship of the exogenous variables (*gender measurement*, *gender mainstreaming* and *gender empowerment*) to endogenous variable (*gender equality*). The model was a poor fit since all indices did not reach the acceptable ranges.

The second structural model that was generated showed the interrelationship of the exogenous variables, and its causal relationship on the endogenous variable. Again, it was found that all indices did not fit the all the given criteria, hence, a poor fit.

The third structural model that was generated depicted a causal link of the variables towards gender equality, and their relationships with each other. Still, the model was not a good fit because all values were outside the range criterion for each index.

Table 12
Summary of Goodness of Fit Measures of the Four Generated Models

Model	P-value (>0.05)	CMIN / DF (<5)	NFI (>0.95)	TLI (>0.95)	CFI (>0.95)	GFI (>0.95)	RMSEA (<0.05)	Pclose (>0.05)
1	0.000	8.141	0.700	0.696	0.725	0.902	0.134	0.000
2	0.000	6.142	0.776	0.781	0.805	0.891	0.114	0.000
3	0.000	6.674	0.795	0.796	0.820	0.886	0.119	0.000
4	.083	2.082	.976	.981	.987	.967	.042	.395

Legend: CMIN/DF–*Chi Square/Degrees of Freedom* NFI– *Normed Fit Index*
GFI– *Goodness of Fit Index* TLI– *Tucker-Lewis Index*
RMSEA– *Root Mean Square of Error Approximation* CFI–*Comparative Fit Index*

Finally, a good fit was found in a modified model showing the direct link of the gender empowerment (exogenous variable) to gender equality (endogenous variable) and their relationship with each other. An indirect link of gender mainstreaming (exogenous variable) to gender equality was also established. In this model, all indices fit each of the criterion range: CMIN/DF= 2.082, p-value=.083; RMSEA=.042, pclose=.395; all other indices such as NFI, TLI, CFI and GFI are all greater than 0.95. This result rejected the hypothesis which claimed that there is no best fit model for gender equality.

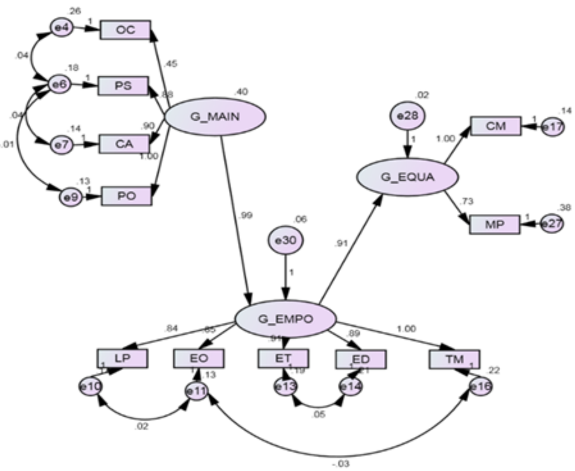

Figure 5. Generated Model 4. The Best Fit Model for Gender Equality

Legend:

G_MAIN=*Gender Mainstreaming*
OC=*Organizational Culture*
PS=*Partners & Staff Capacity Development*
CA=*Communication/Awareness & Promotion*
PO=*Policies*
G_EQUA
CM – Corporate Mission and Values
MP - Maternity & Paternity Protection and Family Assistance

G_EMPO
LP=*Leadership Promotes Gender Equality*
EO=*Equal Opportunity, Inclusion & Non-Discrimination*
ET=*Education & Training*
ED=*Enterprise Development, Supply Chain & Marketing Practices*
TM=*Transparency, Measuring & Reporting*

CONCLUSIONS

The study concludes that there are structural models for gender equality. This study proves that gender empowerment (GE) and gender mainstreaming (GM) are the best structural models for gender equality. That, if managers and administrators would want gender equality to happen in their workplaces, these two variables, GE and GM, must be strongly supported and maintained, or gender equality will unlikely happen.

RECOMMENDATIONS

The following recommendations are drawn from the findings and conclusions of the study.

1. Since it is proved that gender empowerment and gender mainstreaming are the best models for gender equality, it is therefore recommended that workplace institutions should initiate/introduce activities and programs that can bolster gender development perspectives so that men and women in the workplace can experience equal treatment and have equal opportunities, thus finding the workplace a worthwhile environment for growth and development. The government is allotting five percent of its gross budget to GAD activities every year, so, administrators can design Gender and Development programs for their employees.
2. This study may be replicated in other institutions, especially in the private sector, so that the findings of this study can be validated. Also, researchers may conduct another study that might uncover other models of gender equality.

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GENDER MAINSTREAMING IN OCCIDENTAL MINDORO STATE COLLEGE

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ABSTRACT

This study was conducted to reveal the level of awareness and attitude of the respondents towards Gender And Development in terms of gender roles and relations, gender perceptions and expectations, gender stereotyping and gender socialization; and the extent of perception on institutional support towards GAD in terms of policy, people, enabling mechanism and program, projects and activities and find out whether these are significantly related to the gender mainstreaming using the Gender Mainstreaming Evaluation Tool in OMSC. Descriptive-correlation research using survey research design was employed among 462 selected respondents from the group of students, employees, faculty and administrators in five (5) campuses of OMSC. The respondents were highly aware of gender and development, with uncertain attitude towards gender and development and perceived that the institution highly supports gender and development. The mainstreaming efforts of OMSC are in stage two (2) which means that the school has installed strategic mechanisms. People and enabling mechanism are already in stage three (3). However, policy and programs, projects and activities are still in stage one (1). The respondents differ in their level of awareness and attitude towards GAD but with similar perception on institutional support towards GAD. Thus, the institution should formulate policies that will support the people and strengthen the enabling mechanism to ensure integration of in programs, projects and activities, conduct more gender related activities and integrate GAD in all aspects of transactions to improve the attitude of the employees, faculty and administrators towards Gender And Development.

Keywords: ***Gender Mainstreaming, Gender and Development, Gender Mainstreaming***

INTRODUCTION

Gender mainstreaming is both a technical and political process. It is the strategy of the organization to integrate a gender perspective to all aspects of an institution's programs, policy and activities, through building gender capacity and accountability (Walby, 2005). Sensitizing programs result in positive attitude change. Gender awareness is important not only to the teachers but also among students. It contributes to equity and equality in education and aims towards better for men and women (Verdonk, et al. 2005).

Mainstreaming in education may include approaches like research, curriculum development, institutional policies and assessment of gender, training of trainers and materials development (Brown, 2010). In order to sustain the government's programs on GAD, presidents of state universities and colleges, other public and private higher education institutions entered into a covenant, commitment and partnership in re-affirming the World Declaration on Higher Education for the 21st century on October 12, 2011.

As a higher institution of learning, Occidental Mindoro State College conducts programs and activities in support to the government's program on gender and development. Gender issues in Occidental Mindoro State College are classified as client – focused and organization – focused. Based from the Annual Gender and Development Accomplishment Report for 2015, OMSC's client – focused issues involve the inclusion of GAD concepts to curricula and various students' activities, insufficient GAD - related research, implementing GAD – related extension activities and

and trainings. Activities conducted involving clients were seminar – workshops, orientation scholarships for marginalized students and researches on women and marginalized groups in the community. On the other hand, organization – focused issues include the involvement of key officials in planning and implementation of GAD initiatives in the college, mainstreaming of GAD concepts for the faculty and staff , the need to strengthen GFPS of the institution and participation in the Annual Women's Month Celebration. From 1.99% of the total GAA in 2013 the utilization of budget for gender mainstreaming increased to 13.02% of the total GAA. This is a strong inclination that institutional support towards gender and development has improved. Because of diversity of context, of learners, of teachers, as well as the diversity of frameworks for education and development, educational institutions must develop flexible policies and flexible practices. The processes of learning and influencing that enrich policy and practice can only flourish if there are good partnership between practitioners, policy makers, and researchers (Rhynie, 1999).

Despite the active research and extension activities of the college, this topic remains under-examined. Determining the current level of awareness, attitude and perception of the administrators, faculty, staff and students will inform the officials of the college of the progress of gender mainstreaming, the gaps and the possible solutions or actions that must be undertaken to ensure compliance with the mandate of the government. Hence, the researcher was encouraged to assess the present status of gender mainstreaming in the institution and to what extent gender issues might have been mainstreamed in the academe.

OBJECTIVES

It is the intent of the study to reveal the level of awareness, attitude and perception on institutional support towards GAD of the respondents and find out whether these are significantly related to the gender mainstreaming in OMSC.

The study also aimed to:

1. Find out the level of awareness of the respondents towards Gender and Development in terms of gender roles and relations, gender perceptions and expectations, gender stereotyping, and gender socialization;
2. Analyze the level of attitude of the respondents towards Gender and Development in terms of gender roles and relations, gender perceptions and expectations, gender stereotyping, and gender socialization;
3. Find out the perception of the respondents on the extent of institutional support towards GAD in terms of policy, people, enabling mechanism and program, projects and activities;
4. Determine the gender mainstreaming in OMSC using the Gender Mainstreaming Evaluation Tool;
5. Test the difference in the awareness, attitude and perceptions of the respondents towards Gender and Development; and
6. Gauge if the awareness, attitude and perceptions towards institutional support to GAD are related to the gender mainstreaming in Occidental Mindoro State College.

METHODOLOGY

The descriptive-correlation research using survey research design was employed to analyze the relationship of awareness, attitude, and perceptions on institutional support towards gender and development to the status of gender mainstreaming in OMSC.

This study used multi-stage sampling technique among 462 selected respondents from the group of students, employees, faculty and administrators from the different departments and units of the institution. The respondents were grouped into cluster, from the clusters, simple random sampling technique was utilized. There were four clusters; each cluster refers to students, faculty, employees and administrators. From each cluster, the respondents were identified using simple random sampling procedure or technique.

The survey questionnaire was self-designed based on the existing literature and assessment tool for gender mainstreaming. The first part determined the awareness, the second determined the attitude and the third determined the perception of the respondents on the extent of institutional support towards gender and development. To determine the gender mainstreaming in OMSC, Gender Mainstreaming Evaluation Tool was used. The questionnaire was pre-test among the selected administrators, faculty, staff and students of the College of Arts, Sciences and Technology. GAD coordinators likewise studied the content on how accurately the questions were formulated to elicit the information sought. After the validity and reliability tests and consultation with experts, changes to the questionnaire were made. The data gathered were tabulated for treatment, analysis and interpretation.

Likert Scale was used to determine the awareness, attitude and perception on institutional support towards Gender and Development in OMSC. To determine if there is a difference in perceptions on institutional support towards GAD in OMSC, when the awareness and attitude are considered, ANOVA was used. To determine the relationship of awareness, attitude and perception on institutional support towards gender and development to the gender mainstreaming in OMSC, regression analysis was used. The analysis of the correlation was set at the 0.05 level of significance. Analysis of data was done through the use of Statistical Passage for Social Sciences (SPSS) computer software.

RESULTS AND DISCUSSION

Level of Awareness on Gender and Development

Table 1 shows that respondents are aware on Gender And Development with the grand mean of 4.29. This is in conformity with the concept that gender awareness is important not only to the teachers but also among the students. It contributes to equity and equality in education and aims towards better for men and women (Verdonk, Benschop, de Haes, & Janssen, 2008). In the same manner that respondents are aware on all the concepts of gender and development: gender roles and relations (mean – 4.29), gender perceptions and expectations (mean – 4.31), and gender stereotyping (mean – 4.07) except for gender socialization where they were "very much aware" with a mean value of 4.50.

As to the awareness on gender roles and relations an overall mean value of 4.29 interpreted as "Aware". The item with the highest mean in gender roles and relations is "Teachers may either be a man or a woman" this supports that though teaching is viewed as a profession for women (Harper, Kirini& Bridges, 2004), assigned roles and relations are socially constructed and expected to change over time (Reeves & Baden, 2000). As to the awareness on gender perceptions and expectations an overall mean value of 4.31 interpreted as "Aware". The item with the highest mean is "Given proper education and training opportunities, women can be as successful as men." this a proof that participation of women and girls in decision making about their own education is a fundamental aspect of developing an education which transforms women's lives in the way that they desire (Aikman & Unterhalter, 2005). Also, awareness on gender stereotyping had an overall mean value of 4.07 interpreted as "Aware". The item with the highest mean is "Female students can be independent in classroom and organization activities" it shows that though women are believed to have more communal qualities (Nock & Dusenge, 2013), they can work as hard as men (Skelton, 2003). Lastly, the overall mean of awareness on gender socialization had an overall value of 4.50 interpreted as "Very much aware". The indicator with the highest mean is "Girls, like boys, have the right to go to school." True enough, education, is a human right (Beijing Declaration and Platform for Action). Non – discriminatory education benefits all the members of the academic community and it is within the classroom that a child, boy or girl, learns of his basic rights (Newman, Mugisha&Matsiko, 2012).

Table 1.Summary of level of awareness on gender and development

Indicators	Mean	Interpretation
Awareness on gender roles and relations	4.29	High
Awareness on gender perceptions and expectations	4.31	High
Awareness on gender stereotyping	4.07	High
Awareness on gender socialization	4.50	Very high
Grand Mean	**4.29**	**High**

Level of Attitude Towards Gender and Development

Table 2 enunciates that the respondents' attitude towards gender and development is "Neither positive nor negative" with the grand mean of 3.32. The respondents' attitude towards all concepts of gender and development is neither positive nor negative: gender roles and relations (mean – 3.45), gender perceptions and expectations (mean – 2.94), gender stereotyping (mean – 3.40) and gender socialization (mean – 3.49).

Attitude on gender roles and relations hadanoverall mean value of 3.45 interpreted as “Neither positive nor negative”. The item with the highest mean in gender roles and relations is “Male students should have short hair.” This confirms that the society assigned the roles and relations of men and women (Heilman, 2001) and physical appearance is included. Proper attire and haircut for men and women are also prescribed (Harper, Kirini& Bridges, 2004).In addition, attitude on gender perceptions and expectations hadan overall mean value of 2.94 interpreted as “Neither positive nor negative”. The item with highest mean in gender perceptions and expectations is “Men are good at technical or field work.” Gender perceptions and expectations are strongly connected to the assigned roles and relations in the society (Reeves & Baden, 2000). Men are esteemed stronger than women (Skelton, 2003) so their roles in the society involve their use of physical strength (Harper, Kirini& Bridges, 2004; Heilman, 2001).Also, attitude on gender stereotyping hadan overall mean value of 3.40 interpreted as “Neither positive nor negative”. The item with the highest mean in gender stereotyping is “Male teachers are logical in dealing with their students”. This is because men are stereotyped to have more agentry qualities like independence, aggressiveness, autonomy, instrumentality and courage (Nock&Dusenge, 2013).Lastly, attitude on gender socialization had an overall mean value of 3.49 interpreted as “Neither positive nor negative”. The item with the highest mean is “Mothers take care of the children” with mean value of 4.35 interpreted as “Positive”. It supports that women have more communal qualities like expressiveness, connectedness, relatedness, kindness, supportiveness and timidness (Nock&Dusenge,2013). These characteristics do not just describe but also prescribe what a man and a woman could be (Marlow & Carter, 2004; Fuchs &Tamkins, 2004; Schein, 2001). Their assigned roles involve caring and nurturing (Harper, Kirini& Bridges, 2004) and these are often seen on mothers.

Table 2.Summary of attitude towards gender and development.

Indicators	Mean	Interpretation
Attitude towards gender roles and relations	3.45	Uncertain
Attitude towards gender perceptions and expectations	2.94	Uncertain
Attitude towards gender stereotyping	3.40	Uncertain
Attitude towards gender socialization	3.49	Uncertain
Grand Mean	**3.32**	**Uncertain**

Institutional Support towards Gender and Development

Table 3 indicates a grand mean of 3.92, it means that the institutional support towards gender and development was high. These results reveal that OMSC highly supports gender and development an affirmation that political will for gender equality exists at the highest level of on an institution (Newman, Mugisha&Matsiko, 2012).On all entry points of gender mainstreaming, the respondents perceive that the institution highly supports gender and development: policy (mean – 4.00), people (mean – 3.95), enabling mechanism (mean – 3.88) and programs, projects and activities (mean – 3.84).

Policies had an overall mean value of 4.00 interpreted as “High”. The item with the highest mean in policies is “There is a policy to ensure that programs and activities are not gender -biased”. This is an attestation that though gender mainstreaming literature has focused on government policy and action (Rubery, 2002) it is not the sole responsibility of the government. Responsibility for the implementation of gender policy is diffused across the organizational structure, rather than concentrated in a small central unit to result in equality of outcome.In addition, people had an overall mean value of 3.95 interpreted as “High”. The item with the highest mean is “School heads are supportive to gender mainstreaming efforts” This confirms that OMSC’s administration is supportive to gender mainstreaming efforts as revealed by the Annual Gender and Development Accomplishment Report for 2015. Also, enabling mechanism had an overall mean value of 3.88 interpreted as “High”. The item with the highest mean is “OMSC provides and conducts GAD-related training to teachers, employees and students”. It validates the Annual GAD accomplishment report for 2015 that OMSC conducts seminars, orientation and GAD – related training to its stakeholders and allocates funds for GAD activities. Lastly, the overall mean of program, projects and activities had a value of 3.84 interpreted as “High”. The item with the highest mean is “The equal rights and roles of men and women are considered in programs and activities” with mean value of 4.15 interpreted as “High”.

Table 3.Summary of institutional support towards gender and development.

Indicators	Mean	Interpretation
Policies	4.00	High
People	3.95	High
Enabling Mechanism	3.88	High
Programs, Projects and Activities	3.84	High
Grand Mean	**3.92**	**High**

Gender Mainstreaming in OMSC

Using the Gender Mainstreaming Evaluation Tool, people got the highest mean score of 2.75 with and equivalent description of stage 3 which means that in this entry point the school is already applying gender and development. It is followed by enabling mechanism with mean score of 2.5 (stage 3 – GAD application) which also means that the school is applying gender and development in this entry point. On the other hand programs, projects and activities (mean score - .6) and policy (mean score - .5) are still in foundation and formation stage of level 1. This implies that the school is still in foundation formation in its policies, programs, projects and activities. Results of the assessment using Gender Mainstreaming Evaluation Framework (GMEF) reveal that although the school has applied gender and development in its people and enabling mechanisms, policies that will its strengthen the practice and implementation are still in foundation formation stage. This is clearly evident in the status of programs, projects and activities which are still in the foundation formation stage. Though the people in the school are aware of gender and development and the school is doing its part in improving enabling mechanisms, the people in the school were not able to conduct extensive programs, projects and activities as there were no policies that will empower them to do so.

However, combining all the efforts of the institution, OMSC's gender mainstreaming efforts are classified under stage two (2+) with a mean score of 1.59 which means that the school is already installing strategic mechanisms. The rating of two plus (2+) signifies that the school demonstrated more than adequate accomplishments efforts in stage two. Further, the data reveal that efforts on policy is in stage one, people in stage four, enabling mechanisms in stage three and programs, projects ad activities in stage one. The study reveals the progress, gap and possible undertakings to be done by the institution to fasten gender mainstreaming towards the attainment of gender equality and women empowerment in the college.

Table 4. Summary of Gender Mainstreaming in OMSC, using GMEF

Key Areas		Score
Policy		.5
People		2.75
Enabling Mechanisms		2.5
Overall Average Score		**1.59**
Stage	**2+**	**Installation of Strategic Mechanisms**

Comparison of awareness, attitude, and perceptions of the respondents on institutional support towards Gender and Development

Table 5 reveals that there was a significant difference in the respondents' awareness(t = -2.23) and attitude (t= -2.07) towards gender and development. The results indicate that female respondents have higher level of awareness and more positive attitude on gender and development than males. Thus, the null hypothesis "there is no significant difference in the awareness and attitude towards gender and development when the respondents' profile is considered" is rejected. This has to be expected since gender and development promotes including women and their own perceptions of political interest and projects into policy making processes, they are likely to develop higher level of awareness and positive attitude compare to men.

However, it also reveals that there was no significant difference in the respondents' perception on institutional support(t= -.499) towards gender and development. Thus, the null hypothesis "there is no significant difference in the perception on gender and development when the respondents' profile is considered" is accepted. This is also expected since the respondents are all from the same institution and the political will for gender equality exists at the highest level in the institution (Newman, Mugisha&Matsiko, 2012). The same perception of respondents on institutional support towards gender and development reveals that there are good partnerships between practitioners, policy makers, and researchers (Rhynie, 1999) in the institution.

Table 5. Comparison of awareness, attitude, and perceptions of the respondents on institutional support towards gender and development.

Variable	t-value	Significance	Mean Difference	Interpretation
Awareness on GAD	-2.23	.027	-.10	Significant
Attitude Towards GAD	-2.07	.039	-.18	Significant
Perception on Institutional Support Towards GAD	-.499	.618	.03	Not Significant

Relationship of the Respondents' Awareness, Attitude, and Perception on the Status of Gender Mainstreaming n OMSC

Regression analysis reveals that the attitude towards gender perceptions and expectations (B=.-.263, p=.013) was related to the status of gender mainstreaming on enabling mechanisms.Similarly, awareness on gender perceptions and expectations (B=.-.152, p=.050) was related to the gender mainstreaming on programs, projects and activities. Societal expectations and perceptions, which are reflected in and perpetuated by laws, policies, procedures, systems, programs, projects and activities of government, once not fairly offered to members of both sexes, could impede women's full development and their participation in and equal enjoyment of the fruits of development (NCRFW-DILG, 2008).

CONCLUSIONS

The following conclusions were made from the results of the study:

1. The respondents are "Highly" aware of gender and development.
2. The respondents have "Uncertain" attitude towards gender and development.
3. The institution "Highly" supports gender and development mainstreaming.
4. The gender mainstreaming efforts of Occidental Mindoro State College is on the stage of installing strategic mechanisms.
5. The respondents have different levels of awareness and attitude but with the same perceptions towards gender and development.
6. The respondents' attitude towards gender perceptions and expectations is related to the gender mainstreaming on enabling mechanisms. Similarly, awareness on gender perceptions and expectations was related to the gender mainstreaming on programs, projects and activities.

RECOMMENDATIONS

The following recommendations are unassumingly offered:

1. Review the existing policies governing programs, projects and activities of OMSC to determine their gender responsiveness.
2. Formulate specific gender responsive policies that will support the institution's mandate.
3. Develop and use information, education and communication campaigns strategies and materials appropriate for school administrators, faculty, staff and students.
4. Formulate guidelines on the integration of gender and development in the institution's overall work to encourage full participation of all members of the academe.
5. Conduct further study on gender mainstreaming per college or per unit in the institution.

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TEACHING STYLE, ACADEMIC MOTIVATION AND ACADEMIC PERFORMANCE: A BASIS FOR FACULTY DEVELOPMENT PROGRAM

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ABSTRACT

Walking into any college or university in the country, one will find students with different preferred teaching styles, different reasons for attending, and different attitudes and expectations toward their learning. This study focused on variables which are believed to predict students' performance, namely, teaching style and academic motivation. Participants of the study were the 200 teacher education students in Occidental Mindoro State College. The instruments used in the study were Grasha and Riechmann Teaching Styles Survey and Academic Motivation Survey by Vallerand, et. al. Results of the study found that instructors/professors' teaching styles relate to students' academic motivation. Similarly, teaching styles and students' academic motivation are significantly related to students' academic performance. Among the teaching styles in the Grasha and Riechmann's framework, expert was found to best predict students' performance. Between intrinsic and extrinsic motivations, extrinsic motivation was found to better predict students' performance. The study recommends teachers use a variety of styles to reach all students of different levels of motivation, and to include the identified factors in plans for faculty development.

Keywords***: teaching style, academic motivation, academic performance, faculty development, teacher education***

INTRODUCTION

In order to enhance the value of a college education, it is important to identify the relationship between receptiveness to various instructional techniques and individual differences in academic motivation. Instructional techniques do not impact all students equally, and that students with different profiles of academic motivation will prefer and value different instructional techniques. For years, scholars across numerous disciplines have analyzed various instructional methods and sought to identify those that are most effective (Komarraju & Karau, 2008).

Previous studies confirmed that as students enter higher education, they are often overflowing with a high self-perception of competence and intrinsic motivation. However, over the next two years, this self-confidence and drive slowly decline. The persistent decline of students' motivation levels may correlate to student dropout rates in later years (Hansen & Toso, 2007).

The early implementation of a self-motivating environment will aid in the steady progression of self-motivated learners. These learners will be focused on "increasing their level of mastery and view the material they are learning in school as valuable, interesting, and useful to know" (Wolters, 2004). Research that examines motivation is essential to the academic success of all students.

Research on motivation has evolved over time with several theories intertwined. The theory of motivation being innate, related to rewards or reinforcements, parts of growth and development, and triggered by emotions has been a common thread in motivational theory. These differences in motivation could lead students to be either willing or unwilling learners depending on how they are taught, and students are likely to differ in the instructional techniques that they find most engaging (Sutton & Wheatley, 2003).

Prior researches and theories suggest that pedagogical choices can have significant impact on various aspects of student learning, and one of which is their eagerness to consider new information. Thus, students' preferences for various instructional techniques could affect their academic motivation (Komarraju & Karau, 2008). For example, Diaz-Lefevre (2004) caution against teaching methods that encourage rote memorization as these methods tend to lead to low motivation, poor performance, and consequently, inability to apply the course material to real life. In addition, Grasha (1994) described and emphasized a body of work which considers importance of teaching methods to various student characteristics to enhance academic motivation, which will promote student interest and learning.

Academic motivation and learning approaches, together, explained academic success (Çetin, 2015). With this, aside from considering student differences in their levels of academic motivation when selecting instructional techniques, these two factors, teaching styles and academic motivation, could be considered in terms on their impact on classroom climate and performance.

As students are the direct observers of the teaching process (Raza, Majid & Zia, 2010), the current study is designed to explore teachers' teaching styles and how these match or relate with the students' academic motivation which could result to good or poor academic performance. This also tried to identify the degree of need for teaching development of teachers and could recommended ways for improvement. It would then help faculty in strengthening their teaching as well as the college to focus on faculty development.

OBJECTIVES

Generally, this research paper sought to find out the relationship among the teaching styles employed by the instructors, the students' academic motivation and their academic performance. Specifically, this aimed to:

1. determine the extent of use of teaching styles of the instructors/professors as perceived by the students;
2. identify the level of academic motivation of the students;
3. determine the students' academic performance;
4. test if there is a significant relationship among instructors/professors' teaching styles, students' academic motivation and students' academic performance;
5. identify which teaching style best predicts students' academic performance; and
6. identify which academic motivation better predicts students' academic performance.

METHODOLOGY

Taking into account the nature of this study, descriptive, correlational design was employed to investigate the relationship between teaching styles and academic motivation and teaching style to academic performance. Similar research design was employed on academic motivation and its relationship with academic performance. This study is also predictive in nature as it attempted to find out which of the factors of teaching style and academic motivation best predict the academic performance of the students.

The respondents of the study were the 200 College of Teacher Education students. This study made use of probability sampling specifically stratified random sampling, due to the fact that the population consists of three (3) subpopulations. To determine the number of respondents per stratum to be included in the sample, proportional allocation was used.

Two instruments were used in order to gather the needed data. To investigate the instructors/professors' level of teaching style, the Grasha -Riechmann Teaching Styles Inventory was used. The following scale was used:

Style	***Low***	***Moderate***	***High***
Expert	*< 2.8*	*<=3.8*	*<=5*
Formal Authority	*<1.9*	*<=3.1*	*<=5*
Personal Model	*<2.8*	*<=3.4*	*<=5*
Facilitator	*<3.0*	*<=4.0*	*<=5*
Delegator	*<1.8*	*<=2.8*	*<=5*

On the other hand, Academic Motivation Survey (Vallerand, *et. al.*, 1992) was utilized to measure the level of intrinsic and extrinsic motivations of the respondents using the following scale:

6.50-7.00	Very High
4.50-6.49	High Level
3.50-4.49	Moderate Level
2.50-3.49	Low Level
1.0-2.49	Very Low Level

The validity and reliability of the research instruments were established before its utilization. To ensure the reliability of the instruments for the conduct of the present research, the instruments were reliability-tested among the 50 College of Teacher Education students. The reliability indexes of 0.97 and 0.93 for the two instruments resulting from the use of Cronbach alpha indicated that the instruments had the capacity to elicit stable data.

To measure the extent of teaching styles of the instructors/professors as perceived by the students, frequency and mean were used. The same statistical tools were used to identify students' academic performance using the following scale for interpretation:

93 – 95	Excellent	81 – 83	Satisfactory
90 – 92	Superior	78 – 80	Fair
87 – 89	Very Good	75 – 77	Pass
84 – 86	Good	74 – below	Fail

To determine the correlation among teaching style, academic motivation and academic performance, Pearson Product Moment Correlation was utilized. Lastly, to determine which teaching style best predicts academic performance and which academic motivation better predicts academic performance, regression analysis was used.

FINDINGS

Teaching Style

Table 1 reports the mean extent of use of the teaching styles of the instructors/professors as perceived by the students. It can be noticed that, as perceived by the students, all of the five teaching styles were employed at a high extent

Teaching Style	Mean	Description
Expert	4.25	High
Formal Authority	4.01	High
Personal Model	4.29	High
Facilitator	4.31	High
Delegator	4.22	High

According to Alhussain (2012), teaching styles can vary between a lecturer/teacher-centered approach and a student/learner centered approach based on a teacher's thoughts, ability, and beliefs about what constitutes a good teaching. Some teachers believe that a class should be teacher-centered, where the teacher is the expert and authority in presenting information. In contrast, others take a learner-centered approach, where teachers view their role more like a facilitator for students learning.

Teaching style awareness may also impact on the classroom setting, activities assessment, and teacher-student interactions which become information for better understanding, changing, modifying, and supporting to improve their interaction with students while maintaining all contextual aspects of teaching. Due to the various types of both teaching styles and learning styles in every classroom, many educators have suggested that learning and teaching styles interaction might reduce inequality of learning by getting more information of their matching styles (Alhussain, 2012).

The changes needed at the core of today's educational school systems are processes. We need to provide students with undeniable reasons to remain in school, methods of cognitive science to enhance their learning, and teacher created learning environments that enable students to be the center of learning that opens their minds to think critically and to be participative members of society. Hence, in an effort to meet teacher effectiveness, educational demands and state policies should be aimed toward enhancing teaching and learning aspects such as teachers' instructional delivery and teaching styles (Davis-Langston, 2012).

Through awareness of their teaching styles, teachers may gain a better understanding of themselves to improve their instructional delivery. This research may create a sense of urgency for school administrators and teachers to find appropriate ways to help students meet and exceed their academic grade level requirements.

Academic Motivation

Table 2 presents the mean level of academic motivation of the students. It can be gleaned from the table that with a means of 5.70 and 5.96 respectively, both indicators of academic motivation, namely intrinsic and extrinsic motivations, are high. With the overall mean of 5.83, the students have a high level of academic motivation.

The data imply that respondents have a high intrinsic motivation which means that they have participation in an activity purely out of curiosity, that is, for a need to know about something; the desire to engage in an activity purely for the sake of participating in and completing a task; and the desire to contribute.

Table 2. Level of academic motivations of the students

Academic Motivation	Mean	Description
Intrinsic	5.70	High
Extrinsic	5.96	High
Overall Mean	**5.83**	**High**

Intrinsic motivation has been widely researched by educational psychologists, social psychologist, and by many other intuitive individuals. It requires much persistence and effort put forth by an individual student. Students with intrinsic motivation would develop goals such as, the goal to learn and the goal to achieve.

A mastery goal, the desire to gain understanding of a topic, has been found to correlate with effective learning strategies, positive attitudes toward school, the choice of difficult tasks as opposed to a simple task, perceived ability, effort, concern of future consequences, self-regulation, the use of deep cognitive processes, persistence, achievement, choice and initiative (Shia, 2013).

The finding also indicates that majority of the respondents are motivated to study to secure a better life in the future. These also imply that the respondents are motivated not only because they want high grades but also they believe that having good grades is also a way of landing to a good career, achievement and self-improvement. According to Hegarty (2010), extrinsically motivated behavior appears to be done in order to reach an extrinsic reward. In such a situation, the person may be a pawn to the mediator of the reward. Intrinsically motivated behavior, like Origin behavior, seems to involve freedom and self-investment.

Contrary to intrinsically motivated behaviors, extrinsically motivated behavior is instrumental in nature and is performed as means students to an end. According to Tiwari V., Tiwari P. and Sharma (2014), there are at least three types of extrinsic motivation which can be ordered along an autonomy continuum. From lower to higher levels of autonomy, they are external regulation, interjected regulation and identified regulation.

Academic Performance

With the increasing diversity of students attending college, there is a growing interest in the factors predicting academic performance. Determinants of college students' academic performance have been studied in the past and new determinants that might be predictors of it are introduced in the current studies and researches. Academic performance is usually measured or represented by the grades which can be an indicator of how a student performed in school.

Table 3 shows the academic performance of the respondents in terms of their Grade Weighted Average (GWA). It can be observed from the table that with a mean GWA of 87.43, the College of Teacher Education students have a very good academic performance.

Table 3. Students' academic performance.

Academic Performance	Mean	Interpretation
GWA	87.43	Very Good

Relationship among Teaching Style, Academic Motivation and Academic Performance

As shown on Table 4, the teaching style of the instructors/professors is significantly related to academic motivation with r - coefficient of .240 which is significant at .05 level of significance. This result implies that the teaching style of the instructors/professors, as perceived by the students, affects students' academic motivation, which means that the students' direction, intensity and persistence of behavior related to learning and achievement an academic framework could be affected by the teaching methods and practices utilized by a teacher to conduct a learning activity.

It can also be noted that both the teaching style of the instructors/professors and students' academic motivation are found to be related to students' academic performance. The r-coefficients of .532 and .453 respectively are significant at .05 level of significance. Thus, the way students are taught and their willingness or desire to be engaged and commit effort to completing a task could affect their academic performance.

Table 4. Relationship among teaching style, academic motivation and academic performance

Variables	(TS)	(AM)	(AP)
Teaching Style (TS)	000	.240*	.532*
Academic Motivation (AM)		.000	.453*
Academic Performance (AP)			

** significant at the 0.05 level.*

Results support the study made by Velasquez and Tan (2013) which revealed a significant relationship between the teachers' teaching styles and the academic performance of the students. Like the present study, teachers were also categorized into six teaching styles based on the teaching style model introduced by Grasha (1996). In their study, majority of the teacher-respondents were found as facilitators which found to be the second best predictor of pre-service teachers' academic performance.

Effective teachers allow students the opportunity to interact, learn, succeed, and work to their topmost potential. When measuring teacher quality, one must determine the one thing that is connected directly to student achievement and teaching (Barnes and Aguerrebere, 2006). Research suggests that not one teaching method is best for everyone and many teaching styles can be motivational (McCombs and Miller, 2012).

Many studies support the relationship of academic motivation to academic performance or achievement. Ekhlas and Shangarffam (2013) found correlations between academic self-regulated strategies and reading, writing, speaking, listening, and language experience. Carolina, Lucia and Rossana (2014) determined that self-regulated learning and motivation had positive effects on academic achievement. Rytkonen, *et. al.* (2012) demonstrated that social support and self-regulation skills are important for academic achievement. Amrai, *et. al.* (2011) detected a correlation between academic achievement and motivation.

Teaching Style and Academic Performance

Shown on Table 5 is the regression analysis between instructors/professors' teaching styles and students' academic performance. Approximately 57.5% (R^2=0.575) of the variability the students' academic performance could be attributed to the teaching styles of the instructors/ professors. However, only two of the teaching styles are found to have significant relationship to academic performance, namely, expert and facilitator teaching styles which obtained beta coefficients of 0.457 and 0.243 respectively. Between the two, expert teaching style is found to be a better predictor of academic performance.

Table 5. Regression analysis between teaching styles and academic performance

Independent Variable	Dependent Variable	Multiple R	R^2	Beta Coefficient	p-value
Expert	Academic Performance	0.758	0.575	.457	.000 *
Formal Authority				.104	.342
Personal Model				.085	.320
Facilitator				.243	.001 *
Delegator				.046	.212

** significant at the 0.05 level*

The findings further indicate that the expert teaching style is the strongest predictor of students' academic performance and the weakest is the delegator teaching style.

This further implies that the students prefer instructors/professors who possess knowledge and expertise that they need and strive to maintain status as an expert among students by displaying detailed knowledge and by challenging students to enhance their competence. Moreover, students like teachers who are concerned with transmitting in formation and ensuring that students are well prepared (Grasha, 2002).

Academic Motivation and Academic Performance

The data on regression analysis between the students' academic motivation and their academic performance is presented in Table 6. It can be gleaned from the table that only the extrinsic motivation was found to be related to students' academic performance.

Table 6. Regression analysis between academic motivations and academic performance

Independent Variable	Dependent Variable	Multiple R	R^2	Beta Coefficient	p-value
Intrinsic	Academic Performance	0.587	0.345	.238	.267
Extrinsic				.457	.001*

** significant at the 0.05 level*

Approximately 34.5% (R^2=0.345) of the variability of academic performance could be credited to the academic motivation of students. The extrinsic motivation, which is the stronger predictor, obtained a higher beta coefficient of 0.457 than that of intrinsic motivation which attained 0.238 beta coefficient.

The result implies that motivation of the students is derived from external forces and is geared toward achieving a particular end or purpose. Students' sense of extrinsic motivation is the drive to perform academically for instrumental reasons; that is, external rewards and punishments, and to maintain socially important values. The findings also indicate that the respondents have the perception that education is the key to success.

CONCLUSION

Based on the findings, the following conclusions were derived:

1. The extent of use of teaching styles of the instructors/professors as perceived by the students is high.
2. The students have a high level of academic motivation.
3. The students' academic performance is very good.
4. There is a significant relationship among instructors/professors' teaching styles, students' academic motivation and students' academic performance.
5. Among the five teaching styles, expert teaching style best predicts students' academic performance.
6. Between the two academic motivations, extrinsic motivation better predicts students' academic performance.

RECOMMENDATION

The discussion above leads to the following recommendations:

1. Instructors/professors must be aware of the ways students learn in order to observe the differentiated instruction of the students according to their academic motivation, on the purpose of improving their academic achievement
2. In their approach to teaching-learning environment, teachers should use skills and methods of teaching that will help to motivate students.
3. Teachers could try providing activities inside the classroom that would also enhance intrinsic motivation among students, *i.e.* self-determined activity.
4. The two factors, teaching styles and academic motivations, may be considered for teaching development of teachers as well as included in focus on faculty development.

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TEACHERS' CLASSROOM PRACTICES AND STUDENTS' PERFORMANCE IN MATHEMATICS

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ABSTRACT

Teachers' classroom practices provide opportunities that make students powerful learners of mathematics. This paper investigates students' performance in mathematics based on the content and cognitive domains and teachers' performance in the classroom practices. Such performance focused on classroom community, classroom discourse, classroom tasks and teachers' knowledge. A model was developed to predict students' performance in mathematics using the parameters of classroom practices. This study utilized a mixed method of quantitative and qualitative. The data were collected through an adapted questionnaire and a semi-structured interview with the first year college students randomly selected as the respondents. The findings revealed that students performed better in Geometry and Number Sense and less in Data and Chance. They also demonstrated strength in knowing skill but poor in reasoning ability. Furthermore, teachers' performances were perceived as slightly effective in all areas. However, they were perceived to have a very satisfactory knowledge of the subject matter. Teachers' classroom practices were positively and significantly ($p < .05$) correlated with students' performance. Among the variables, teachers' knowledge has the highest contribution to students' performance. The regression model with all four predictors produced a R^2 of .657 with F-value of 43.686 and p-value of .000 ($p < .05$). The model illustrated that teachers' performance in the classroom practices explains 65.7% of the variability of the students' performance in mathematics.

Keywords: ***Mathematics, students' performance, teachers' classroom practices, regression model, mixed method***

INTRODUCTION

Mathematics is a contributor towards developmental facets and in influencing individual's life. However, students' mathematics performance has persistently been poor (Mbugua et al., 2012). It was evident in the general assessment outcome of Trends in International Mathematics and Science Study. Also in the national, regional, division and even in the school math assessment studies showing learners' different degrees of difficulty in mathematics (Luna and Aclan, 2016). This discouraging achievement of students in Math has become the concern of policymakers and educators worldwide . In fact, proficiency in mathematics is one of the 10-point agenda of Pres. Benigno Aquino (Geronimo, 2016). Moreover, teachers are at the heart of effective mathematics education (Ismail et al.,2015. Improving student outcomes is also about improving the quality of the teaching workforce (OECD), thus assessing students' performance especially in the core math competencies which are required for learning higher math and teachers' performance should be given utmost attention.

Students' knowledge and thinking skills are developed from classroom instruction. Likewise, effective pedagogical classroom practices contribute to desirable student outcomes as confirmed by Anthony & Walshaw,2009. Also, Goldhaber et al., 2010 and Hightower et al.,2011 pointed out that teacher quality is the most important factor in students' achievement. Teacher practices are indicators of teacher quality Goe and Stickler 2008. These teachers' practices according to them show a positive impact on students' performance in mathematics. The variables considered in such practices are as follows: alignment of instruction and assessments, intellectual challenge, explaining what they are learning, clear learning objectives and performance, expectations explaining what they are learning, and active learning. Mbugua et al., 2012 focused on a school-based factor that affected students' performance in math. Such factor focused on teachers' attributes, attitude towards math, effectiveness, methods of teaching math, and Teaching/Learning Materials for Mathematics.

The previous studies that have been reviewed revealed that the teacher attributes have an impact on the students' achievement and performance in mathematics. The said teachers' attributes are limited only to teachers' personal, professional qualification, knowledge of the subject matter and the methods used in teaching math. Currently, there is a scarcity of data sets that linked teacher and students. Hence Goe and Stickler (2008) suggested conducting more research studies relating to students' performance in math and teachers' practices.

Teachers' Classroom practices in this present study refer to the teachers' skills in creating classroom discourse, mathematical task, caring community which is required to provide students with the best learning opportunities to develop the students' mathematics proficiency and become great learners (National Research Council,2001; Anthony and Walshaw, 2009. Thus this study was investigated to determine the performance of students in Mathematics and to develop a predictive for students' performance based on teachers' classroom practices.

OBJECTIVES

This study aimed to:

1. determine students' mathematics performance in the content and cognitive domains;
2. determine teachers' performance in the classroom practices as to creating classroom community, discourse in the classroom, mathematical tasks, and teachers' knowledge;
3. formulate a predictive model for students mathematics performance based on teachers' classroom practices.

METHODOLOGY

This study utilized a mixed method utilizing a survey research design which investigated the mathematical domains of students enrolled in Math and engineering courses. The sample consisted of 180 randomly selected first-year students from the three campuses of Cebu Technological University namely Bitoon, Moalboal and Main Campus. The performance of students in Basic Mathematics is measured through a questionnaire adapted from Third International Mathematics and Science Study 2012 (TIMSS). The questionnaire covered two areas, content and cognitive. Content domain comprises of algebra, number sense, geometry, and statistics and probability while cognitive domain encompasses knowing, applying and reasoning. Knowing skill denotes to the learners' knowledge of mathematics concepts, tools, and procedures; while applying skill refers to the ability of the learners to apply knowledge and conceptual understanding in a problem situation; and reasoning goes beyond the solution of everyday problems to encompass strange situations, complex contexts, and multi-step problems.

Teachers' performance in the classroom practices was determined based on the adopted questionnaire taken from the study of Anthony and Walshaw, 2009 entitled "Effective Mathematics Pedagogy and a semi-structured interview. The questionnaire reflected the ten principles of the effective pedagogy of Mathematics. The learners were requested to rate their teachers' performance in the classroom practice such as classroom community, classroom discourse, and mathematical tasks. Each item can be rated with the following range: 1=ineffective; 2=slightly ineffective; 3= slightly effective; 4 = effective and 5 = very effective while the teacher knowledge was rated as 1= need improvement; 2= Fair ; 3= satisfactory; and 4= very satisfactory; 5= excellent. The interview was also conducted with selected students about their experiences with their teachers and in learning mathematics in the classroom to substantiate their ratings.

Multiple regression analysis was used to determine the relationships between students' performance and their teachers' performance in the classroom practices to develop a model. Basic assumptions of normality, linearity, and homoscedasticity were assessed for the response variable (Students' performance in math) and explanatory variables before the data analyses.

FINDINGS

Students' Performance

Figure1 shows the percentage of students' performance in the content domains. Results revealed that majority of the students or above fifty percent of them did well in the Number Sense and Geometry. Almost half (50%) of them performed better in Algebra. Among the content areas, they struggled in Statistics and Probability. Although, the majority of the respondents showed mastery on the basic math, still, many of them have not mastered the essential competencies. These competencies are a prerequisite for taking higher math. Since students enrolled in math related courses are expected to have mastered the basic skills in math, their performance in such competencies will also determine their success in their chosen course.

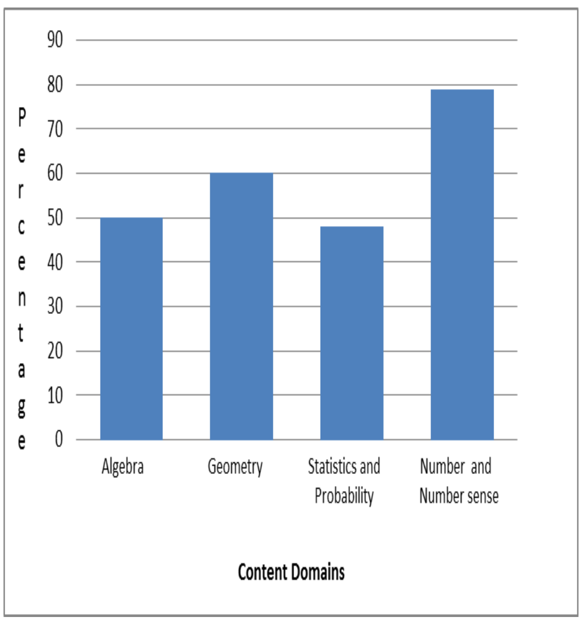

Figure 1. Percentage of students' performance in content domains

The proportion of the respondents' performance in the cognitive domains: knowing, applying and reasoning is shown in figure 2. Results showed that they demonstrated strength in knowing skill since more than seventy percent (70%) of them got all items correctly, while more than half of them has poor applying and reasoning skills. Moreover, the respondents excel only on facts, they have manifested mastery on the need to know in mathematics like recalling definitions, terminologies, number and geometric properties. They have shown familiarity with factual knowledge which is the foundation of mathematical thought, and the procedures that serve as the bridge of this knowledge in solving real-life problems. However, they find it hard to apply mathematical facts, abilities, processes, and representation to address the problems in real life situations. Reasoning skill is the most challenging skill to develop to students because this involves the capacity for logical and systematic thinking required to solve strange problems.

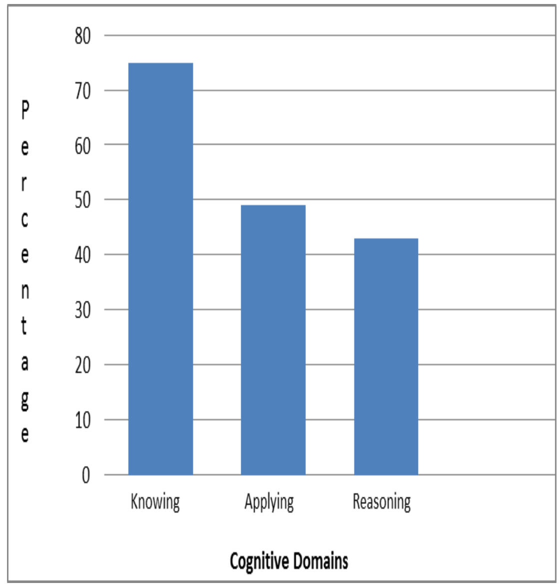

Figure 2. Percentage of students' performance in cognitive domains

Teachers' Performance

Classroom community

It refers to teachers performance in creating a caring classroom to help develop students' mathematical proficiencies and provides them with opportunities to make sense of ideas both independently and collaboratively (Anthony and Walshaw, 2009).

Table 1. Students' perceptions' of Teachers' performance in the classroom practice

Variables	WM	Description
Classroom Community	2.79	Slightly effective
Discourse in the Classroom	2.69	Slightly effective
Mathematical Tasks	2.90	Slightly effective
Teachers' Knowledge	3.41	Very satisfactory

Results (Table 1) exposed that teachers' performance in classroom community was perceived as *slightly effective***.** It means that teachers failed to create a caring classroom with various learning activities. This result was validated based on the interview conducted to the selected respondents. For them, some of their teachers are strict, so they are afraid to ask questions during their difficulty in learning math. Their teacher seldom gives group activity; they only have seat work after discussion. When asked further about the kind of math teacher they wanted, most of them appreciated math teachers showing care for their learning. They even prefer teachers' emotional quotient than intellectual quotient. As Capa, 2013 said, it is the heart that rules the learners, not the mind. Thus, the teacher has to reach the student' heart, and he will reach as well the student's mind and in the process captivate the student's interest.

In a caring environment, students' felt that they are respected and valued. They can also open up to their teacher the difficulties they experience in their lessons. In this way, teachers can also do necessary actions to help students in their difficulty. Since daily classroom practices play a vital role in the development of students 'mathematical thinking, the teacher has to provide challenging classroom activities. Furthermore, the sense of belongingness of the student is developed in the classroom with the teacher's guidance and persuasion. Through this interaction, students are given the opportunity for individual and group learning which is important in developing students' mathematical domains.

Discourse in the Classroom

Discourse in the classroom includes mathematical communication which focused on the teachers' facilitating classroom dialogue that is focused towards mathematical argumentation and adapting the use of mathematical language through teachers' modeling appropriate terms and communicating their meaning in a way that students understand (Anthony and Walshaw, 2009).

As reflected in Table 1, teachers' performance in classroom discourse was perceived as **slightly effective.** It implies that teachers need to improve their performance in facilitating mathematical communication that makes students confident in explaining or justifying their answers by way of oral or written.

Based on the interview, the respondents shared that most of their teachers did paper and pencil test or seat work only. Also, teacher seldom allows them to explain their work to their classmates to avoid noise and cheating. Also, some teachers seldom elicit mathematical conversation in the classroom.

It is therefore essential that teachers should teach their students the process of explaining their answers by oral, written or by representation. They must also encourage students to be open to their ideas and to support or defend their views. Listening and giving support to students' ideas help teachers to determine when to interfere in the discussion to elicit understanding, when to resolve challenging student claims, and when to address confusions (Lobato, Clarke, & Ellis, 2005). Also, mathematical terms used in the discussion must be within the student's level to have a smooth transfer of knowledge.

Mathematical Task

It refers to teachers' performance in providing important tasks, making the connection of lesson to real life situation and using the appropriate tools and representation to facilitate learning (Anthony and Walshaw, 2009)

As reflected in Table 1, teachers' performance was described as **slightly effective**. It showed teachers' deficiency in this area. They fail to provide mathematical tasks that help students develop understandings of how a mathematical concept or skill is connected in various ways to other mathematical ideas. It might be the reasons for students' poorly developed applying and reasoning abilities.

Based on students' interview, they said that their mathematics teachers provide class activity right after the discussion, such activity was for the mastery of getting the right answer as demonstrated by the teacher. It apparently exposed that mathematical tasks in the classroom are at the knowing level only. The essential skills, applying and reasoning, are sacrificed.

Watson & Mason, 2006 declared that teachers need to provide students with classroom tasks where they can establish connections to their real-life experiences and be able to come up their strategies to elucidate mathematical ideas. Because according to Anthony and Walshaw,2009 when students can apply the math concepts in solving real-life problems they would realize that the subject is relevant and exciting. Since, it is through mathematical tasks, that learners are given opportunities to learn, engage, and make sense of mathematics, teachers need to ensure that these tasks are designed to train students in all mathematical domains.

Teachers Knowledge

It refers to teachers' knowledge to initiate learning and to act responsively towards the Mathematical needs of all their students.
Tables 1 presents students' rating of their teachers' knowledge. As seen in the result, the mean score of 3.41 was described as **very satisfactory.** It implies that their teachers manifest knowledge in mathematics. It is a good result because as a Math teacher, it is presumed that they have mastered not only the content of the subject but the strategies to be employed as well.

Result also showed a significant positive relationship between teachers' knowledge and students' performance**.** It could be the reason that majority of the respondents shows mastery of the math competencies. The present result was similar to the result obtained by Hill et al.,2010 that mathematical knowledge was significantly related to student achievement in math.

Based on the interview, the students admitted that most of their teachers are knowledgeable in mathematics or their teachers show mastery in the topic they teach. However, they commented that sometimes they have difficulty understanding the concept taught. Also, most of their teachers are subject-centered aiming to finish the coverage of the subject. Students' learning is sometimes compromised.

Regression Model for Students' Performance in Mathematics

SP = 4.22 (teachers' knowledge) + 3.00 (classroom task) + 1.72 classroom discourse + 1.84 classroom community

Teachers' performances in the classroom practices such as classroom community, classroom discourse, mathematical tasks and teachers' knowledge were used as predictors or explanatory variables to model student's performance in mathematics.

Table 2. Regression model for students' performance in Mathematics (SP)

	B	Std Error	t-value	p-value
Intercept	-2.11	2.90	-0.73	0.469
Classroom community	1.84	0.71	2.60	0.011
Discourse in the Classroom	1.72	0.60	2.86	0.005
Mathematical tasks	3.00	0.75	4.02	0.000
Teachers' Knowledge	4.22	1.06	3.99	0.000

R-squared: .657 ; F-statistics: 43.686 on 5 and 179; df, ; p-value: 0.000

Results revealed that the obtained F-value (43.69) and p-value (0.000) show that all variables were significantly related to students' performance. Such variables were significant predictors for this model. Furthermore, the model can predict 65.7 percent ($R^2 = 0.657$) of the variance in students' mathematics performance. Among the predictors, teachers' knowledge has the greatest impact on students' performance.

CONCLUSION

From the derived findings, it was concluded that:

- Students' performance has to be improved notably in the area of statistics and probability. Also, their applying and reasoning skills need to be enhanced.
- Teachers' classroom practices particularly in creating classroom community, discourse in the classroom and creating mathematical task have to be upgraded.
- Teachers' performance in the classroom practices significantly influenced students' performance in mathematics.

Students' performance may improve by enhancing teachers' performance

RECOMMENDATIONS

Based on the findings and conclusion, the authors recommend the following:

- ► Teachers should not only focus on subject content but to consider as well the effective pedagogy in teaching mathematics to obtain desirable outcomes.
- ► Teachers have to employ learning opportunities that would develop students' mathematical skills particularly in applying and reasoning skills.
- ► Teachers have to engage in pedagogical training to improve their skills in dealing classroom practices.
- ► Teachers must strive to improve their teaching practices by seeking feedback from their students about their performance as a basis for their improvement.
- ► The regression model has to be utilized as a guide for improving students' performance.

ACKNOWLEDGMENT

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HEALTH CARE PROVIDERS' KNOWLEDGE OF AND ATTITUDE TOWARDS COMPUTER APPLICATIONS IN RURAL HEALTH FACILITIES IN SAN JOSE & MAGSAYSAY, OCCIDENTAL MINDORO

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ABSTRACT

The descriptive research aims to determine the socio-demographic characteristics of the healthcare providers, the health workers' knowledge of and attitudes towards computer applications and the relationship between socio-demographic characteristics of the healthcare providers and their knowledge of and attitudes towards computer applications. The study was conducted in the Rural Health Unit of San Jose, Occidental Mindoro from March to June 2017. The 32 health workers in San Jose Public Health and Diagnostic Center and Rural Health Unit in Magsaysay (Dr. Franco S. Barrera Memorial Health Center) were purposively selected as respondents of the study. Survey and interview were used to gather the pertinent data. Descriptive statistics was used to analyzed the gathered data. Results shows the healthcare providers are female, young, college graduate, and have long work experience in the maternal and newborn care section and had assisted the rural health doctor during consultations. The healthcare providers have "high" level of knowledge on computer and its applications and had expressed "positive" attitudes towards the use of computers in their work. Further, age, and number of years spent in formal education have a significant relationship with the healthcare providers' knowledge of and attitude towards computer applications.

Keywords: ***health care, computer, applications, rural, ICT***

INTRODUCTION

In the past two decades computer literacy courses have been part of the nursing curricula and other allied field. Despite this, there seems to be limited use of computers by professional health workers in the rural context.

The implementation of information and communication technologies (ICT) can positively influence many aspects of healthcare provision. However, its implementation in developing countries has been slow, particularly in rural areas. Several issues, such as technical infrastructure, and computer knowledge, skills, experience, and attitudes of prospective users, need to be addressed before introducing computers in rural healthcare settings. There is evidence that health workers' interest, knowledge and skills of computer applications can influence their acceptance, or not, of ICT solutions in the workplace. Positive attitudes are important and the willingness of health workers to use any ICT system is influenced by their perceptions of its value, clinical benefits, and ease of use.

Complex factors contribute to the formation of attitudes towards IT. Many of the issues identified were around the flexibility of the systems and whether they were 'fit for purpose', along with the confidence and experience of the IT users. The literature suggests that attitudes of practitioners are a significant factor in the acceptance and efficiency of use of IT in practice. The literature also suggested that education and training was a factor for encouraging the use of IT systems (Ward et al, 2008).

The literature also suggested that education and training was a factor for encouraging the use of IT systems (Ward et al, 2008).

According to Assah (2011) the contributing factors were found to be lack of information technology infrastructure, restricted access to computers and deficits in regard to the technical and nursing management support. The physical location of computers within the health-care facilities and lack of relevant software emerged as specific obstacles to usage.

Overall, the attitudes of nurses toward HIT are positive. Increased computer experience is the main demographic indicator for positive attitudes. The most common detractors are poor system design, system slowdown and system downtime. Nurses are also fearful that the use of technology will dehumanize patient care (Huryk, 2010).

Currently the literature lacks information about the knowledge and attitudes of health workers towards computer applications in primary healthcare facilities in rural Occidental Mindoro settings. Thus, this study will be proposed to serve as a benchmark for the Information Technology Department in developing an ICT based solution to the health care delivery system.

OBJECTIVES OF THE STUDY

The study was conducted to:

1. Determine the socio-demographic characteristics of the healthcare providers, in terms of:
   a)age,
   b)sex,
   c)number of years spent in formal education,
   d)job title, and
   e)years of work experience.

2. Determine the health workers' knowledge on computer applications.
3.. Determine the health workers' attitude towards computer applications.
4. Determine the relationship between the healthcare providers' age, number of years spent in formal education, and years of work experience and their knowledge of computer applications.
5. Determine the relationship between the healthcare providers' age, number of years spent in formal education, and years of work experience and their attitude towards computer applications.

Theoretical Framework

Various models describe the adaptation of computers in an organization. Lewin's field theory describes three main phases: unfreezing of old patterns, moving and experimenting with new behaviors and refreezing when new behavior becomes part of every-day business processes that are considered normal.

A model that specially deals with user acceptance is the technology acceptance model (TAM) developed by Davis et al. (1994). According to this model, user acceptance is strongly influenced by the perceived usefulness of a system. This perceived usefulness itself can be divided, according to Vassar et al (1999), into four main parts: characteristics of the information system itself, characteristics of the users, characteristics of the task processes, and other environmental characteristics. Dixon (1999) extended the TAM model to the Information Technology Adoption Model (ITAM), further refining the individual characteristics of the users, using the notion of a "fit" between the IT and the user.

METHODOLOGY

The study was conducted in the Rural Health Unit of San Jose, Occidental Mindoro from March to June 2017. The respondents of the study were the 32 or 70% of 45 health workers San Jose Public Health and Diagnostic Center and Rural Health Unit in Magsaysay (Dr. Franco S. Barrera Memorial Health Center), who were involved in the provision of maternal and newborn care at the study sites. The respondents were selected based on their willingness to be part of the study. Informed consent were sought prior to the conduct of the study.

The part I of the survey was developed to collect socio-demographic information such as age, sex, and professional qualifications of the health worker including educational level, position, years of work experience in maternal and newborn care, workplace, and previous computer training and use (if any). While, part II was the self-rated computer knowledge and computer attitude. It was validated by experts in the field and pre tested in Rural Health Unit personnel that were not part of the study. .

For the computer knowledge, the following scale was used: 0.50-1.50-Strongly disagree; 1.51- 2.50-Disagree;2.51- 3.50-Undecided ;3.51-4.50-Agree; 4.51-5.00-Strongly Agree.

For the attitude the towards computer, the following scale was used: 0.50-1.50-Strongly disagree; 1.51- 2.50-Disagree;2.51- 3.50-Undecided ;3.51-4.50-Agree; 4.51-5.00-Strongly Agree.

Lastly, descriptive statistics was used to describe the socio-demographic characteristics, level of knowledge and attitude, while Pearson Moment Correlation was used to determine the relationship among variables.

FINDINGS

Socio-demographic characteristics of the healthcare providers in San Jose Public Health and Diagnostic Center and Rural Health Unit in Magsaysay

The primary health care provider is a person you may see first for checkups and health problems. PCPs can help manage your overall health (MediPlus,nd).

The healthcare providers in San Jose Public Health and Diagnostic Center and Rural Health Unit in Magsaysay are young with a mean age of 27.61 ranging from 21-51.They were graduate of Midwifery and Nursing course with a mean of 3.18 years spent in formal education. They hold either a nursing (59.37%) or a midwife (40.63%) position. They have work for at least 6.73 years in the maternal and newborn care section and had assisted the rural health doctor during consultations.

In addition, majority of the healthcare providers were female (62.50%). This holds true with the report of Philippine Commission on Women (2014) that Medical and Allied Discipline courses posted the highest percentage of female enrollees at 27.44 percent followed by Business Administration and Related Discipline at 24.35 percent.

Table 1. Socio-demographic characteristics of the healthcare providers.

Characteristics	Frequency (n=32)	Percentage (%)
Age	Mean=27.68 Range=21-51	
Sex		
Male	12	37.50
Female	20	62.50
Number of years spent in formal education	Mean=3.18 Range=2-4years	
Position		
Nurse 1	16	50.00
Nurse 2	3	9.37
Midwife	13	40.63
Years of work experience	Mean=6.75 Range=2-14 years	

Healthcare professionals' knowledge level on computer use and application

The ability to use computers is an important prerequisite for nurses and nurse candidates, who can benefit in clinical practice from acquiring health and nursing information via computer. Requirements for the success of computer-based interventions in healthcare include the familiarity of the users with the technology (Asah, 2011) and positive mental attitudes and motivation regarding computer use (Huryk ,2010).

Result shows that there is “high” level of knowledge on ICT use with a mean of 3.62. This may be due to the fact that most of the healthcare providers in the two Rural Health Units were young and belongs to the “millennial” category, wherein the generation is generally marked by an increased use and familiarity with communications, media, and digital technologies.

This is in contrast with the studies in sub-Saharan Africa that reported low computer knowledge among health workers (Kivuti-Bitok, 2009). Ramanadin and Kaur (2013) shows that though we are in technology world many of the staff nurses have less awareness towards computer application in nursing practice.

Table 2. Healthcare professionals' knowledge level on computer use and application

ICT Facilities and tools in Rural Health Unit	Mean	Interpretation
Computer (PCs)	3.69	High
Printer	3.92	High
Fax machine	2.53	Moderate
Mobile phone	4.38	High
Tablet computer	3.77	High
Digital camera	3.54	High
Computerize sensor	2.46	Low
Body scanner	2.54	Moderate
Computerize data-	4.23	High
Flask disk/memory	4.00	High
CD-ROMs/DVDs	3.46	Moderate
E-mail	4.23	High
E-journals	3.23	Moderate
E-books	3.15	Moderate
Internet	4.15	High
Microsoft access	4.15	High
Microsoft excel	3.46	High
Microsoft Power-	4.23	High
Grand mean	3.62	**High**

Health workers' attitudes towards computer applications

The known barriers to the implementation of IT systems in the healthcare service were identified by Leung *et al* (nd). These were cost related (both financial and time/effort) and the knowledge/attitude of end-users.

The health workers' attitude has a grand mean of 3.51 interpreted as "agree." They "agree" that computers/computerized clinical decision support system (CDSS) can assist in their work at the health centre (mean=4.23), capable to use the computer/CDSS during patient care (mean=4.23), computers can support my clinical decision making during provision of healthcare (mean=3.85), and use of CDSS will certainly improve quality of care (mean=4.15).

During interviews, most of the providers expressed positive attitudes towards the use of computers in their work. But some, especially older nurses, were "technophobic" and express that they may not cope with the use of new technology at work. When asked about the possible advantages of computers in performing their work as health care providers, believe that it could lessen their administrative works, such as assistance in record keeping and preparation of patients records. '*Computer will decrease my workload*', '*It will help in patients record keeping*', or '*It will support clinical decisions'* were the most frequently stated answers. One provider emphasized another aspect, '*We will be seen by our patients as hi-tech care providers using modern technology during patient care.'*

The Technology Acceptance Model (TAM) may provide a context to study the acceptance, or otherwise, of computer applications in providing healthcare service.

Table 3. Health workers' attitude towards computer applications

Attitude	Mean	Interpretation
I believe computers/computerized clinical decision support system (CDSS) can assist me in my work at the health center.	4.23	Agree
I will be capable to use the computer/CDSS during patient care.	4.23	Agree
I think using computers will increase workload in duties in my health center.	3.38	Undecided
I believe computers can support my clinical decision and administrative works in the provision of healthcare.	3.85	Agree
I will not be capable to learn and use CDSS and other computer systems.	2.46	Disagree
I think use of CDSS will certainly improve quality of care.	4.15	Agree
I do not have time to learn CDSS and other computer systems.	2.38	Disagree
I do not have time to use CDSS and other computer systems.	2.38	Disagree
I believe health workers in the center are willing to learn/use computers at their workplace.	4.55	Strongly Agree
Grand mean	**3.51**	**Agree**

Relationship between the healthcare providers' age, number of years spent in formal education, and years of work experience and their knowledge on computer applications

Result shows that age, and number of years spent in formal education have a significant relationship with the healthcare providers' knowledge on computer applications (using Pearson's r). However, number of years of work experience has no significant relationship.

According to Sukums et al. (2014), educational level, age, and years of work experience were significantly associated with computer knowledge (p<0.01).

Table 4. Relationship between the healthcare providers' age, number of years spent in formal education, and years of work experience and their knowledge on computer applications

	Knowledge		
Profile Variables	**Computed *r***	**Critical *r***	**Interpretation**
Age	0.1396	0. 12	Significant
Number of years spent in formal education	0.1559	0. 12	Significant
Years of work experience	0.0930	0. 12	Not significant

Relationship between the healthcare providers' age, number of years spent in formal education, and years of work experience and attitude towards computer applications

Age, and number of years spent in formal education have a significant relationship with the healthcare providers' attitude towards computer applications (using Pearson's r). However, number of years of work experience has no significant relationship.

This mirrors the findings of Scarpa et al. (1992) that found no differences in attitude with nursing experience or educational level, but had found that experience with computers was significant. However, Lai *et al.* (2004) were unable to demonstrate any influence of age and gender on the translation of intention to actual implementation of a system. Araujo *et al.* (2004) found that computer use, age group and gender were not significant in explaining the attitude.

Table 5. Relationship between the healthcare providers' age, number of years spent in formal education, and years of work experience and their attitude towards computer applications.

	Knowledge		
Profile Variables	**Computed *r***	**Critical *r***	**Interpretation**
Age	0.1396	0. 12	Significant
Number of years spent in formal education	0.1559	0. 12	Significant
Years of work experience	0.056	0. 12	Not significant

CONCLUSIONS

The study has the following conclusions:

1. The healthcare providers in San Jose Public Health and Diagnostic Center and Rural Health Unit in Magsaysay are female, young , college graduate, and have long work experience in the maternal and newborn care section and had assisted the rural health doctor during consultations.
2. The healthcare providers have "high" level of knowledge on computer and its applications.
3. The healthcare providers expressed "positive" attitudes towards the use of computers in their work.
4. Age, and number of years spent in formal education have a significant relationship with the healthcare providers' knowledge on computer applications
5. Age, and number of years spent in formal education have a significant relationship with the healthcare providers' attitude towards computer applications

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GENDER AND EMOTIONAL INTELLIGENCE OF OMSC MANGYAN STUDENTS: BASIS FOR A GENDER-RESPONSIVE GUIDANCE PROGRAM

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ABSTRACT

This study was conducted to find out the profile of the Mangyan students in terms of age, sex, course and tribe they belong to. It also aimed to determine the emotional intelligence of the respondents and how it relates with their sex. The descriptive-quantitative design was used and a standardized test to measure emotional intelligence was utilized. The data collected were subjected to statistical analysis using the mean, percentage and Pearson r. Results revealed that the respondents were emotionally intelligent in terms of social awareness but are low in relationship management and that there are gender differences in terms of emotional intelligence. It is recommended that a guidance program for the Mangyans that will address the need to develop and enhance the emotional intelligence specifically on handling relationships be conceptualized.

Keywords: ***gender, emotional intelligence, Mangyans***

INTRODUCTION

Emotional intelligence is a form of social intelligence and a suitable predictor of general functioning in particular areas including one's ability to manage feelings and emotions, distinguish between them and use such information to direct one's behavior. Previous researches suggest that emotional intelligence is a better predictor of academic performance and affects the choice of careers.

Many studies have been conducted to investigate factors affecting college students' academic performance. Such issues like teacher's education and teaching style, class environment, socioeconomic factor and family background all redound to a single basic factor which is called emotion which is also found to be a factor in the choice of careers.

Mangyans have their own way of life. They have a cultural distinction. The many facets of their socioeconomic and political existence may directly or indirectly affect their emotions. Furthermore, this culture may bring differences on how men and women deal with their emotions.

LITERATURE REVIEW

Emotional intelligence is a form of social intelligence and is a suitable predictor of general functi9oning such as occupational performance (Goleman,2008). More recent findings point out that gender determines the emotion of an individual. In a study conducted by Bracket, Mayer and Warner (2000) it was found that females got meaningfully high scores than males in emotional intelligence. In another study by Khosrow David, he reported that girls had higher scores than the boys in emotional intelligence.

STATEMENT OF THE PROBLEM

The primary objective of this study is to find out if there is a relationship between gender and emotional intelligence of Mangyan students. To determine the profile of the respondents

Specifically, it sought answers to the following:

1. What is the profile of the respondents in terms of age, sex, course and tribes:
2. What is their emotional quotient?

1. Is there a significant relationship between the profile and emotional intelligence of Mangyan students?

METHODOLOGY

The study made use of the descriptive-quantitative method. 30 Mangyan students were randomly chosen to participate in this study from across colleges in all campuses of OMSC. Their demographic data such as age, gender, course and tribe were included in their profile. A standardized Emotional Intelligence Test by Bradberry and Greaves was the main instrument used to test the emotional quotient of the respondents while a self-made questionnaire was used to determine the respondents' profile. The mean, percentage and Pearson r were the statistical tools used in quantifying the data.

FINDINGS

1. Profile of the Respondents

Result shows that in terms of age, most of the respondents belong to the age group of 21-25 with the frequency of 16 or 53.3 percent while the least number of the respondents are in the are in the ages between 26-30 with the frequency of 4 or 13.3 percent.

As to the sex of the Mangyan students, more are females with 16 or 53.3 percent while 14 or 46.7 are males.

Data on the college to which they are enrolled in shows that most of the students are enrolled in the College of Criminal Justice Education(CCJE) with 9 or 30 percent, 7 or 23.3 percent are enrolled in the College of Agriculture (CA), 6 or 20 percent are enrolled in the College of Teacher Education (CTE), 5 or 16.7 percent are students of the College of Arts, Sciences and Technology (CAST), and 3 or 10 percent are enrolled in the College of Business, Administration and Management.

In terms of tribe they belong to, most of the respondents are Tao Buhid with 8 or 26.7 percent, Hanunuo with frequency of 7 or 23.3 percent, 5 or 16.7 are Iraya, both Tadyawan Bangon and Buhid have frequency of 3 or 10 percent, 2 0r 6.7 Ratagnon and Alangan.

Table I. Respondents Profile as To Age, Sex, Course and Tribe

Variables	Frequency Percent	Percent
Age		
15-20	10	33.3
21-25	16	53.3
26-30	4	13.3
Sex		
Male	14	46.7
Female	16	53.3
Course		
CTE	6	20.0
CAST	5	16.7
CBAM	3	10.0
CA	7	23.3
CCJE	9	30.0
Tribe		
Hanunuo	7	23.3
Ratagnon	2	6.7
Tao-buhid	8	26.7
Buhid	3	10.0
Alangan	2	6.7
Tadyawan-bangon	3	10.0
Iraya	5	16.7

2. Emotional Intelligence of the Respondents

On the test of emotional intelligence, it was found that in terms of Personal Competence on self-awareness, the respondents scored high in the indicators " recognize the impact your behavior has upon others with 3.53 and "realize when others influence your emotional state" with the weighted mean of 3.63. However, they scored low in the indicator "confident in your abilities" with a weighted mean of 2.4. This only means that they have not yet developed self-confidence thus, have a low self-esteem. The average weighted mean for self-awareness is 3.22 with the interpretation "moderate".

It can be noted on the data about self-management that the respondents rated themselves high on areas such as"resist the desire to act or speak when it will not help the situation" with 4.03, "consider many options before making a decision" with 3.73, "strive to make the most out of situations whether good or bad" with the weighted mean of 3.67, "do things you regret when upset" with 3.53 and "handle stress well" with 3.20. They rated themselves moderate in all the other indicators on self-management. The average weighted mean is 3.7 interpreted as "moderate".

Data on Social Competence regarding social awareness reveal that the Mangyan students rated themselves high in terms of indicators such as “open to feedback” with a weighted mean of 3.57, “recognize other people’s feelings” with weighted mean of 4.0, accurately pick up on the mood in the room” with the weighted mean of 3.47, and “hear what the other person is really saying” with the highest weighted mean of 4.13. They rated themselves average in all the other indicators. The average weighted mean in this area of social competence is 3.71 which is high.

As to relationship management, their self-rating on most of the indicators such as “directly addresses people in difficult situations”, “communicate clearly and effectively” with weighted mean of 2.25, “explain yourself to others” with 2.21, “handle conflict effectively” with weighted mean of 2.25,”learn about others in order to get along better with them” with 2.02 which are all interpreted as low. They rated themselves average in all the other indicators on relationship management.

Table 2. Data on Emotional Intelligence
A. Personal Competence (Self-Awareness)

Indicators	Weighted Mean	Interpretation
1.Confident in your abilities.	2.40	Low
2.Admit your short comings.	3.17	Average
3.Understand your emotions as they happen.	3.23	Average
4.Recognize the impact your behavior has upon others.	3.53	High
5.Realize when others influence your emotional state.	3.63	High
6.Play a part in creating the difficult circumstances you encounter.	3.39	Average
Average weighted mean	**3.22**	**Average**

B. Personal Competence (Self Management)

1.Can be counted on.	2.87	Average
2.Handle stress well.	3.20	Average
3.Embrace change early on.	3.50	High
4.Tolerate frustration without getting upset.	2.83	Average
5.Consider many options before making a decision.	3.73	High
6.Strive to make the most out of situations whether good or bad.	3.67	High
1.Resist the desire to act or speak when it will not help the situation	4.03	High
2.Do things you regret when upset.	3.53	High
3.Brush people off when something is bothering you.	3.20	High
Average weighted mean	**3.40**	**Average**

C. Social Competence (Social Awareness)

1.Open to feedback.	3.57	High
2.Recognize other people’s feelings.	4.0	High
3.Accurately pick up on the mood in the room.	3.47	Average
4.Hear what the other person is “really” saying.	4.13	High
5.Withdrawn in social situations.	3.40	Average
Average weighted mean	**3.71**	**High**

D. Social Competence (Relationship Management)

1.Directly address people in difficult situations.	2.21	Low
2.Get along well with others.	3.26	Average
3.Communicate clearly and effectively.	2.32	Low
4.Show others you care about what they’re going through.	3.25	Average
5.Handle conflict effectively.	2.25	Low
6.Use sensitivity to another person’s feelings to manage interactions effectively.	2.70	Average
7.Learn about others in order to get along better with them.	2.02	Low
8.Explain yourself to others.	2.21	Low
Average weighted mean	**2.52**	**Low**
TOTAL WEGHTED MEAN	**3.21**	**AVERAGE**

Range:

4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Average
1.81-2.60	Low
1.00-1.80	Very low

On the test of relationship between the variables sex and emotional intelligence, it can be gleaned from the table that the statistical analysis using the Pearson r correlation shows that there is a significant relationship between the two variables as shown in the p-value of .560 at .01 level of significance. Thus, emotional intelligence is affected if the respondent is a male or female.

Table 3. Relationship Between Sex and Emotional Intelligence of Mangyan Students

Profile Variable	r-value	p-value	Interpreta-tion
Sex	.560	.01	Significant

P<.05- Significance

Proposed Guidance Program Overview

The purpose of the career gender-responsive guidance program is to ensure that all students including those who are in the marginalized sector of our society achieve their optimum potential through relevant activities that would best prepare them in their chosen fields in the future. The components of the program include classroom instruction, large and small group activities, school presentations, parent workshops and community events. The services involve individual and group counseling, consultation, referrals, crisis counseling and peer facilitation. For the success of the program, the support systems are the administration, faculty members, community and parents.

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn:

1. Majority of the Mangyan are in the age group of 21-25, more females participated in the study and most are enrolled in the College of Criminal Justice Education and most of the respondents belong to Tao-buhid tribe.
2. The Mangyan students are emotionally intelligent in terms of social awareness which means that they have the ability to read other people and empathize with them but they are low in relationship management. They lack the ability to achieve objectives through and with other people.
3. The study found that there is a significant relationship between sex and emotional intelligence of the respondents. The way a woman handles emotions is different with the way a man does.This consideration is a good input for a gender-responsive guidance program.

RECOMMENDATIONS

On the basis of the conclusions, the following recommendations are forwarded:

1. Provide counseling programs that will accommodate both male and female Mangyans students in making independent career choices.
2. It is also imperative that counselors are trained in recognizing their cultural biases in rendering services to this group belonging to the marginalized sector of our society.

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MULTIPLE INTELLIGENCES, LEARNING STYLES, ATTITUDE TOWARDS LEARNING AND ACADEMIC PERFORMANCE OF SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This study aimed to determine the multiple intelligences, learning styles, attitude towards learning, and academic performance of the Senior High School Students of ASIST Bangued Campus. It described if significant differences exist in students' academic performance and attitude towards learning when grouped according to multiple intelligences and learning styles. Descriptive method of research was applied. An instrument adapted from Armstrong (2013) was used to determine respondents multiple intelligences and learning styles. To measure the attitude of the respondents towards learning, an instrument adapted from Salandan (2013) was used. The data gathered were analyzed using frequency counts and percentages, weighted mean, analysis of variance, bivariate analysis and Scheffe Test. The result of the study showed that respondents were existentialist. Respondents were visual learners. They also displayed different levels of attitude towards learning when grouped according to multiple intelligences and learning styles. There were no significant differences among students' academic performance when grouped according to multiple intelligences and learning styles. Also, the attitude towards learning of the respondents significantly affects their academic performance. In this study, it is recommended that since respondents were existentialists, teachers must provide activities that may require them to work individually or collaboratively to stimulate their creativity, and critical thinking skills. Because the respondents were visual learners, engaging them through the use of computer graphics, statistical graphs, maps, and charts is a must. Lastly, teachers should continue motivating students through active classroom activities to maintain and even improve their positive attitudes towards learning.

Keywords: ***senior high, multiple intelligences, learning styles, attitude, performance***

INTRODUCTION

Students learn in varied ways and teachers have their own specific ways of teaching. Teachers who understand and draw on knowledge of student learning styles and understand their own teaching style can greatly enhance their teaching. Learners exhibit different learning styles and multiple intelligences, and only by accommodating these various abilities can teachers properly plan and conduct assignments and assess what students have learned.

According to Romanelli et al., (2009), the diversity of students engaged in higher education comes with varied ethnic and cultural backgrounds, from a multitude of training programs and institutions, and with differing learning styles. Coupled with this increase in diversification has been a growth in distance education programs and expansions in the types of instructional media used to deliver information. These changes and advances in technology have led many educators to reconsider traditional, uniform instruction methods and stress the importance of considering student learning styles in the design and delivery of course content. Mismatches between teacher's style of teaching and a student's method of learning have been cited as potential learning obstacles within the classroom and as a reason for using a variety of teaching modalities to deliver instruction.

Furthermore, Lucas and Corpuz (2011) added that one of the factors that bring about student diversity is thinking or learning styles. Individuals think and learn in distinct ways. In any group of learners there will always be different learning characteristics, particularly in the learners; manner of processing information. Some would absorb the lesson better when they work with their hands than when they just listen. Others would prefer to watch a video about a topic. Students likewise have preferred ways of expressing their thought, feelings, and ideas. Some would prefer to write; others would draw or even dance and sing. These preferences involve thinking or learning styles and multiple intelligences.

Different teaching and learning strategies can accommodate students with these different ability levels, including those who do not learn in traditional ways. Empowering students to learn through multiple modalities fosters a collaborative classroom where students are comfortable experimenting and letting others experiment (Borek, 2003). Multiple intelligences can allow students to safely explore and learn in many ways, and they can help students direct their own learning. By understanding not only that there are different intelligences, but also how to teach to them, teachers can effectively implement lessons in a way that allows all learners to show what they know, not just those who read and write well.

According to Felder and Silvermen (1988) as cited by Alabama (2008), students employ several ways to learn. For the things we have to learn before we can do them, we learn by doing them. Some students learn by seeing and hearing. Some students learn by watching and doing and some learn by visualizing and implementing.

In school, teachers manage much of students' learning. However, learning is enhanced if students can manage it themselves; moreover, once they leave school, people have to manage most of their own learning. To do this, they need to be able to establish goals, to persevere, to monitor their learning progress, to adjust their learning strategies as necessary and to overcome difficulties in learning. Students who leave school with the autonomy to set their own learning goals and with a sense that they can reach those goals are better equipped to learn throughout their lives. A genuine interest in school subjects is important as well. Students with an interest in a subject like mathematics are likely to be more motivated to manage their own learning and develop the requisite skills to become effective learners of that subject (OECD, Learning for Tomorrow's World 2004).

Learners' attitudes towards an object of learning are perceived as playing a fundamental role in the learning process. The concept of attitudes has long been central to social psychology research. Allport as cited by Schwarz and Bohner (2001) presented attitudes as dynamically impacting individuals' reactions towards the objects that trigger them. Eagly and Chaiken (1993) provide an informed definition of attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour and disfavour". Individuals' attitudes are perceived as a source of strong feelings that may affect behavioral actions (Oppenheim, 1992). Weimer (2009) observed students who have the impression that nothing they do will alter the results of the learning process, or who attribute success to good luck and failure to bad luck, or who see the pedagogy and didactic practice of the professor as the sole determinant of success or failure, will make little effort to contribute to their own learning. She further added that it is important for us to remember that what students believe about learning and themselves as learners plays a key role in determining their success as learners.

According to Garcia (2009), students' performances and achievements in the Philippines are continuously deteriorating due to various factors. It was a common teacher observation that students are afraid and perform low to different fields of studies especially in Mathematics, Science and English. The National Achievement Tests show that aside from Mathematics, Science continues to be the most difficult field of study in basic education in the Philippines. In the 1999-2000 National Elementary Achievement Test (NEAT), Filipino pupils gave correct answers to less than 50% of the questions in Science (48.61%). This score has not improved in recent years. Furthermore, the Department of education reported that the performance of the country's public high school students in the NAT has been on the decline and are significantly lower than the scores of public elementary students. In addition, Ordinario (2013) stated that some sectors have expressed concern that the K to 12 program would further worsen the deteriorating performance of the public high school students in National Achievement Test (NAT).

Moreover, National Association of Manufacturers (2005) reported that students' high school experiences too often fail to prepare them for postsecondary education or for the rigors of work in an information-based economy. Surveys consistently show that many high school graduates do not meet employers' standards in a variety of academic areas, as well as in employability skills such as attendance, teamwork and collaboration, and work habits. In addition, many students enter postsecondary education needing remedial coursework. Even when they receive remediation, these students are less likely to earn a degree or certificate than students who do not need remediation (Wirt et al., 2004).

A similarly serious problem is foreseen by experts in our country in the implementation of K-12 program with regards to senior high school track offerings especially in the technical-vocational track. The Tech-Voc Track was believed not to prepare students for work as industry requires. Fr. Onofre G. Inocensio, Jr., SDB, Superintendent of Don Bosco Schools and TVET Centers, on "Implementing the SHS – Tech-Voc Track" presented his study and explained that the senior high school "core curriculum" requirement is so heavy that there would be no time to develop the hands-on skills in the students that such as the manufacturing industry requires. There is adequate time to train manicurists and pedicurists, but shall these provide the skills necessary for industrial development of the nation. Within the time-constraints of the senior high school, Fr. Inocensio's thesis is that it is not possible to truly develop the multi-skilled students needed for industry. He confirmed in his study in in recent dialogues with industry that what is important is not that the student has gone through a required number of hours in vocational training, but that the students actually have the skills required by industry. His solution for Don Bosco schools is that they will focus on teaching the skills as required by industry, using skilled teachers and the industrial machinery and equipment required to impart them, and insure thereby that the student be employed.

Aligned to the arising problem, this study aimed to determine the multiple intelligences, learning styles, attitude towards learning, and the academic performance of the grade 11 senior high school students of ASIST majoring in technical-vocational tracks. The researcher believe that determining students' multiple intelligences, learning styles, and their attitude towards learning will enable technical-vocational teachers to give more focus as to how their students learn best and what really interest them to learn. It is important for teachers to know all of these for them to create and design lesson plans, instructional materials, and classroom activities that will suit to the need of the diverse learners in the classroom. When students' needs for learning are fully addressed, the teaching-learning process will be easier and that student cognitive and psychomotor skills will be improved. According to Sternberg (1997), when learners learn in a way that suits them, improvements in the effectiveness of the learning process normally ensue. Having an understanding of different teaching approaches from which we all can learn, as well as a toolbox with a variety of ways to present content to students, is valuable for increasing the accessibility of learning experiences for all students. To develop this toolbox, it is especially important to gather ongoing information about student strengths and challenges as well as their developing interests and activities they dislike. Providing students with multiple ways to access content improves learning (Hattie, 2011). Providing students with multiple ways to demonstrate knowledge and skills increases engagement and learning, and provides teachers with more accurate understanding of students' knowledge and skills (Darling-Hammond, 2010). Instruction should be informed as much as possible by detailed knowledge about students' specific strengths, needs, and areas for growth (Tomlinson, 2014). Gardner (1983) added in his theory of multiple intelligences that learning is both a social and psychological process. When students understand the balance of their own multiple intelligences they begin to manage their own learning and value their individual strengths.

With the presented considerations above, the researcher hoped to gather crucial and sufficient information to help students recognize the important differences between their multiple intelligences, learning styles, attitude towards learning, and their academic performance so that they can take control or direct their own learning through modifying their habits and materials for optimum learning.

STATEMENT OF THE PROBLEM

This study aimed to determine the multiple intelligences, learning styles, attitude towards learning, and the academic performance of the Senior High School Students of Abra State Institute of Sciences and Technology, Bangued Campus.

Specifically, it sought to answer the following questions:

1. Which of the multiple intelligences the senior high school students of ASIST found the strongest and weakest with respect to
   a.Verbal-Linguistic;
   b.Logical-Mathematical;
   c.Visual-Spatial;
   d.Bodily-Kinesthetic;
   e.Musical, Interpersonal;
   f.Intrapersonal;
   g.Naturalist, and
   h.Existentialist?
2. What is/are the learning style/s of the respondents?
3. What is the attitude towards learning of the senior high school students?
4. Are there significant differences between the attitude towards learning of the senior high school students when grouped according to multiple intelligences and learning styles?
5. Are there significant differences in the level of academic performance of the respondents when grouped according to multiple intelligences and learning styles?
6. Is there significant relationship between the attitudes towards learning of senior high school students and their level of academic performance?

REVIEW OF RELATED LITERATURE

This section presents a review of literature and studies that have an important bearing on the present study.

On Multiple Intelligences

By teaching using the Multiple Intelligences Theory, a classroom is being created that is similar to the real-world and an environment where all children can be successful. A belief necessary for this change to take place is that, "All intelligences are as equally important. This is in great contrast to traditional education systems that typically place a strong emphasis on the development and use of verbal and mathematical intelligences. Thus, the Theory of Multiple Intelligences implies that educators should recognize and teach to a broader range of talents and skills" (Fogarty, 2005). The Multiple Intelligence Theory proposes that children all learn material in different ways and it assists in understanding their strengths and weaknesses. Knowing children's learning strengths and weaknesses will help teachers encourage students to try new ways of learning. It will also aid teachers in planning according to the classroom's abilities (Guignon, 2004).

The Multiple Intelligences classroom helps students realize how smart they are by providing them with different outlets of learning. More time in planning and preparation might be necessary when using Gardner's theory. The Multiple Intelligences classroom looks different than the typical Linguistic/Mathematical classroom. It requires a few important ingredients such as: "administrative support, student choice in planning, and patience and persistence in working through initial resistance to MI activities by both students and colleagues" (Shearer, 2004, Shepard, 2004).

Providing opportunities for students to learn in ways in which they are most receptive maximizes their potential for success in the academic setting and in real life (Armstrong, 1994; Beckam, 1998). Integrating multiple intelligences into the classroom setting does not require a major overhaul of teaching methodology or a total revamping of adopted curricula. In general, supplementing and revising existing lesson plans with creative and innovative ideas suffice (Campbell, 1997).

Further, Hall (2004) concluded in her study on "Learner-Centered Instruction and the Theory of Multiple Intelligences" that the theory of multiple intelligences have significant implications for instruction in foreign and second language classrooms. Multiple intelligence theory has the potential to make a positive impact on both teachers and students. Implementation of multiple intelligence in daily instruction relate to students' academic achievement and motivation.

According to Gray (2013), the use of multiple intelligences helps all students succeed. Some students will NOT learn best by listening to a teacher talk, answering questions on a paper, or participating in a discussion.

However, these students may thrive in a hands-on environment. Using multiple intelligences, in many cases, will eliminate classroom management issues. Students usually have behavior problem when they are bored or feel like they have no hope of completing a task. If you can incorporate more than one type of intelligence into your teaching, it is likely that your students will be engaged and enthusiastic about the task. The use of multiple intelligences helps students further develop all of the intelligences. Research shows that all students possess all of the intelligences to some degree.

Gardner (2006) stated that if we all had exactly the same kind of mind and there was only one kind of intelligence, then we could teach everybody the same thing in the same way and assesses them in the same way and that would be fair. But once we realize that people have very different kinds of minds, different kinds of strengths – some people are good in thinking spatially, some in thinking language, others are very logical, other people need to be hands on and explore actively and try things out -- then education, which treat everybody the same way, is actually the most unfair education.

On Learning Styles

Montgomery and Groat (1996) concluded that inevitably, students bring to the classroom a great diversity of learning styles. As Grasha (1996) argues, the problems is not that faculty or student mismatches sometimes occur, but rather it is the failure to acknowledge and work out the potential conflicts and misunderstandings that undermine student learning. Indeed, acknowledgement can be empowering for students if they can be aware of their preferred learning styles and assisted in stretching their capabilities to accommodate greater variety (Randall et al. 1995).

According to Reid (1995), individuals have different learning styles, that is, they differ in their 'natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills'. Moreover, although individuals may have some strong style preferences and tendencies, learning styles are not fixed modes of behavior, and, based on different situations and tasks, styles can be extended and modified (Reid 1987; Oxford 2011). However, the extent to which individuals can extend or shift their styles to suit a particular situation varies (Ehrman 1996).

Sternberg (1997) believed that greater awareness of learning preferences and styles helps teachers to be more flexible in their teaching and to utilize a wide range of classroom methodologies. The aim is not to match teaching style to learner preferences, but to help the learner build their skills and capacities to learn well in both preferred and less preferred modes of learning (meta-learning), thus developing effective and life-long learners who can monitor their learning strategies and evaluate their outcomes or achievement.

Lee and Sidhu (2015) in their study on "Engineering Students Learning Preferences" identified that engineering students in UNITEN shared a common learning style preferences that they preferred to learn in sequential, logical way with various hands-on practical activities. However, the current teaching and learning approach may not fully accommodate the learning preference of the students. Results of their research reminded engineering educators that they need to provide multiapproach in teaching and learning in order to accommodate different students learning preferences while widening the students learning capabilities.

Wallace (1995) in his study on "Learning Styles in the Philippines" stated that Filipino students appear to learn best in the early morning. They are most alert, most easily attentive, and best behaved at that time. Filipino students are visual and kinesthetic learners. They prefer to process information by seeing it. They like to receive information from pictures, graphs, diagrams, and visual media. As kinesthetic learners, Filipino students learn well through whole body involvement and direct experience. They want to be as active as they can. Role play, field trips, grouping together with fellow students to form the letters of the alphabet with their bodies, and becoming physically involved in the thoughts expressed in poetry are examples of activities that help them learn. Filipino students, least preferred perceptual modality is auditory. Overall, the learning style preferences of the Filipino students tested would seem to be with the results of Pate, et al. (1990) who found low to moderate correlations between activity level and fitness test items.

Seifoori & Zarei (2011) and Tekiner (2005) confirm that there is a direct correlation between different multiple intelligences and parallel learning styles. As given example, there is a a significant correlation between spatial intelligence and the visual learning style and the bodily-kinesthetic intelligence strongly correlates with the kinesthetic learning style. The findings indicate that correlations do exist in the majority of the different learning styles and intelligences.

On Attitude Towards Learning

OECD Learning for Tomorrow's World (2004) presented results from their study suggesting that students are most likely to initiate high quality learning, using various strategies, if they are well motivated, not anxious about their learning and believe in their own capacities. Students' motivation, their positive self-related beliefs as well as their emotions also affect their use of learning strategies. There are good grounds for this: high quality learning is time and effort-intensive. Learners are only willing to invest such effort if they have a strong interest in a subject or if there is a considerable benefit, in terms of high performance, with learners motivated by the external reward of performing well. Thus, students need to be willing to learn how to learn. From the perspective of teaching this implies that effective ways of learning – including goal setting, strategy selection and the control and evaluation of the learning process – can and should be fostered by the educational setting and by teachers.

Tchekpassi (2013) also revealed that attitudes play an important role in learning. Attitudes contribute to the selection and processing of information in spite of ongoing debates regarding the role of attitudes in information processing. Positive attitudes exert a motivational impact on learning while negative attitudes, to some extent, hinder learning.

In a study aiming to explore university students' attitudes towards learning English, Al-Bustan, and Al-Bustan (2009) found that positive attitudes were shaped by students' reasons for learning. In this study, 97% of the participants showed positive attitudes and agreed that they enjoyed learning English in order to ensure their future careers. The findings also revealed that students' desire to learn English made them feel comfortable in the classroom.

In a study of Mainland Chinese University students' attitudes towards English, Al-Bustan and Al- Bustan (2009) discovered that students' positive attitudes were related to future career purposes. Chung and Huang (2010), and Sayadian and Lashkarian (2010) found that positive attitudes towards English stem from students' awareness of the importance of English and the instrumental role it plays in their lives.

Peterman and Kennedy (2003) argue that students' involvement in classroom activities, their exposure to materials and practices, and increased participation are some of the factors that increase positive attitudes. This study also found that negative attitudes stem from unfavorable issues experienced by learners. Negative learning experiences were found to develop as a result of students' perception of their teachers' attitudes and behavior, evaluations design, courses, and shortage of materials. Among other factors, these results suggest the importance of affective components of attitudes related to teacher-student relationships in learning.

As evidenced by Abu-Melhim (2009) and Bartram (2010), negative attitudes towards learning may develop from learners' evaluation of their teachers as not competent enough, and as not making enough effort to provide adequate explanation of the courses. A mismatch between students' goals and teachers' emphasis on some aspects of the course at the expense of students' needs were found by previous research to generate unfavorable learning attitudes (Bartram, 2010, Bahous, Bacha, and Nabhani, 2011).

Najdi (2013) in his study on "Students Attitude Toward Learning Chemistry" revealed that whether the student is a male or female, he or she has a low attitude toward learning chemistry. The causes could be basically due to the difficulty of the material, the low awareness of the importance of chemistry in our daily life, lack of exposure and fieldtrips, unattractive and low equipped laboratories, together with the poor motivated teachers.

Candeias et.al (2008) revealed in their study on "Student' Attitudes Toward Learning and School" that the importance of understanding attitudes toward school and learning is affected by different combinations of factors. School effect seems to be the most important factor as to the level of students' experience at school. Another important emergent factor is contextual factors. This emerges at the models of attitude toward school and attitude toward learning and is the level of instruction of parents. Thus, it suggests that contextual and cultural experience dictates different kind of attitudes toward school and learning.

Langat (2015) concluded in his study that there is a positive and good attitude towards mathematics as a learning subject by the secondary school students in Kiambu County. The students do not hate the subject as is widely thought but exhibit favorable attitudes towards mathematics. Though Positive attitudes alone may not significantly predict good performance as shown by the students' grades, there are other mediating factors including student effort and commitment that connect attitude and achievement without which attitude alone may not reflect achievement.

Fayombo (2015) revealed in her study that students learn differently and they also prefer different teaching strategies. The onus is on the teacher to use different teaching strategies including videos, role play, games, discussion, and group work and glossary activities as demonstrated in this study to cater for learners' diverse needs as well as improve the information assimilation and learning experiences. Thus, it is necessary for the teachers to discover their learners' distinctive behaviours at the beginning of the academic or training session so as to be able to utilize the teaching strategies that will match the varieties of their students' learning styles for good academic achievement.

METHODOLOGY

The researchers made use of descriptive and correlational method of investigation. Descriptive for it described respondents' multiple intelligences, learning styles, attitude towards learning, and their academic performance. It also used to reveal the differences between students' attitude towards learning when grouped according to their multiple intelligences and learning styles. Correlational for it determined the relationship between students' attitude towards learning and their academic performance.

Population and Locale of the Study

The respondents of this study were the 182 Grade 11 Senior High School students majoring in technical vocational livelihood tracks of Abra State Institute of Sciences and Technology, Bangued Campus, Bangued Abra.

Data Gathering Tools

1. Questionnaire on Multiple Intelligences adapted from Armstrong (2013).
2. Questionnaire on Learning Styles adapted from Armstrong (2013).
3. Questionnaire on Attitude towards Learning adapted from the book Principles of Teaching 1 3rd Edition authored by Corpuz and Salandan (2013).

In the interpretation of the attitude towards learning of the respondents, the following norm was used.

Point Value	Statistical Limits	Descriptive Rating (DR)	Interpretation
4	3.25 – 4.00	Strongly Agree (SA)	Extremely Positive
3	2.50 – 3.24	Slightly Agree (SlA)	Moderately Positive
2	1.75 – 2.49	Slightly Disagree (SlD)	Moderately Negative
1	1.00 – 1.74	Strongly Disagree (SD)	Extremely Negative

Statistical Treatment of Data

1. Frequency counts and percentages were used to describe the multiple intelligences and learning styles of the respondents.
2. Weighted mean was utilized to reveal the level of attitude towards learning of the respondents.
3. Analysis of Variance (ANOVA) was used to show the differences in the attitude and academic performance of the respondents when grouped according to multiple intelligences and learning styles.
4. Scheffe Test was also utilized to further reveal the differences in the attitude and academic performance of the respondents when grouped according to multiple intelligences and learning styles.

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FINDINGS

Table 1.Multiple Intelligence of the Senior High School Students of Abra State Institute of Sciences and Technology

Multiple Intelligence	Frequency (f)	Percentage (%)
Verbal-Linguistic	11	5.98
Logical-Mathematical	6	3.26
Musical	23	12.50
Visual-Spatial	11	5.98
Bodily-Kinesthetic	20	10.87
Interpersonal	7	3.80
Intrapersonal	21	11.41
Naturalist	36	19.57
Existentialist	95	51.63

Table 1 above revealed that all intelligences were possessed by the Senior High School students of Abra State Institute of Sciences and Technology, Bangued Campus. Generally, from the strongest to the weakest type of multiple intelligences possessed by the students are existential (51.63%), naturalist (19.57%), musical (12.50%), intrapersonal (11.41%), bodily-kinesthetic (10.87%), visual-spatial (5.98%) and verbal-linguistic with the same percentages (5.98%), interpersonal (3.80%), and lastly logical-mathematic intelligence (3.26%). The combination of variations of the intelligences is in line with the theory of multiple intelligences. According to Gardner (1983), everyone possesses all types of multiple intelligences: however, the extent to which each is developed in an individual varies from person to person. This was supported by Chan (2005) in his findings revealing that the strongest intelligence was verbal-linguistic and the weakest was naturalist intelligence. It only shows that the strongest types and combinations of intelligences vary from one individual to another.

Further, table 1 shows that majority of the respondents (51.63%) were found to be an existentialist. This means that the respondents understand and see the connection of things to the real world and its application to their new learning. Senior high school students majoring in technical vocational courses are taught different skills which they could use later on in applying to different technical jobs. Students are tasked to master the necessary skills needed for their chosen courses. Their existentialist intelligence can also be attributed to teachers' prowess in relating subject matters to students' existence, real life experiences, and engaging them to wider life perspectives, thus, will make learning deeper and more meaningful. According to Lynch (2016), education from an existentialist perspective places the primary emphasis on students' directing their own learning. The goal of an existentialist education is to train students to develop their own unique understanding of life. Further, he added that an existentialist classroom typically involves the teachers and school laying out what they feel is important and allowing the students to choose what they study.

Above findings was similar to the findings of Emmiyati et al. (2004) in their study on "Multiple Intelligences Profiles of Junior Secondary School Students in Indonesia" which states that existential intelligence was the strongest intelligence among the students and this provides information that basically the Junior Secondary Students in Makassar potentially possess high curiosity on something. Existential intelligence means the ability of macro-viewing and understanding in a large context, sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life, why do we die, and how did we get here (Gardner, 1991). This was further supported by Kelly (2017) in her study stating that existential intelligence involves an individual's ability to use collective values and intuition to understand others and the world around them. People who excel in this intelligence typically are able to see the big picture.

Moreover, the respondents who possess existentialist intelligence responded that they often ponder on the questions "why am I here in this world?" and often reflect on why innocent people suffer. They also spend time reading inspirational books. Also, the students as an existentialist claimed that they want to live their life meaningfully and believe that they have a mission in life. They also believe that there is such a thing as hell but positive enough that they can find happiness. Such characteristics of an existentialist was supported by Nine types (2001) and Gardner (2004) stating that existential intelligence is learned by seeing the big picture as to why we exist, what is our role in the world, what is our place in our family, school and community. This intelligence seeks connections to the real world and involves deep questions about human existence, such as the meaning of life, why people die, and how the human race ended up on planet Earth.

Furthermore, Lynch (2016) articulated in his article on "Philosophies of Education: 3 Types of Student-Centered" that existentialism promotes attentive personal consideration about personal character, beliefs, and choices. The primary question existentialists ask is whether they want to define who they are themselves, or whether they want society to define them. Rather than the belief that the mind needs to understand the universe, existentialists assume that the mind creates its universe. Their beliefs incorporate the inevitability of death, as the afterlife cannot be experienced personally with the current senses, focusing on the fact that the experience we have of the world is temporary and should be appreciated as such.

On the other hand, the senior high school students were found weakest (3.26%) on Logical-Mathematical intelligence. Shepard (2004) and Gardner (2006) define logical or Mathematical intelligence as calculating, creating hypotheses, and completing mathematical operations. Moreover, majority of students find Mathematics as tough and one of the most difficult subjects. This explains why, in general, students possess weak Logical-Mathematical intelligence. This might also be one of the reasons why the senior high school students majoring in technical vocational courses opted to take Science, Technology, Mathematics, and Engineering course (STEM) because it has many too many math and science subjects.

Furthermore, the respondents who appeared to be weak in logical-mathematical intelligence find it difficult to use numbers and numerical symbols. They claimed that they cannot develop equations to describe relationships or to explain their observations. Further, they can hardly see mathematical ratios in the world around them. Math has always been one of their hated classes. They hate to think about numerical issues, examine statistics and, doing puzzles.

Kumar (2013) in his article on "Why Do Students Fear Mathematics?" stated that students fear math because it is abstract. It does not have a shape. Children cannot see it. They need to visualize properly for solving a mathematical problem. Visualization comes from the everyday experience and relating mathematics with it requires a very strong trainer. Students are unable to visualize the concept taught by the teacher. Therefore, their interest level goes down. Hence they start developing a disassociation with the subject. If this disassociation continues for a longer period of time child starts hating mathematics.

The result of this study also confirms the study of Peralta (1990) in which he stressed out that majority of student populace considers Mathematics as their weakness having the impression that it is really a difficult subject to learn. Even in the Elementary level, pupils already begin to complain on the difficulty of the contents of Mathematics. In addition, Amano (1991) stated that observations show that Mathematics is a subject that is seldom liked by students. To a large number of students, it is a series of rules which make them feel pressure instead of pleasure. To them, Mathematics is a monstrous subject.

Likewise, Rojas (1990) also emphasized students' general interest toward Mathematics is from fairly positive to a range of negative feelings. Furthermore, Arranz (1999) observed that in spite of the paramount role of Mathematics in our daily lives, many students hate Mathematics and perform rather poorly in the subject. Most pupils perceive the subject as difficult.

Table 2. Learning Styles of the Senior High School Students of Abra State Institute of Sciences and Technology

Thinking Style	Frequency (f)	Percentage (%)
Visual	138	75.00
Auditory	27	14.67
Kinaesthetic	18	9.78

Table 2 above reveals the learning styles of the students. It was found that majority (138 or 75%) of the senior high school students were visual learners. This means that the respondents under the technical – vocational tracks, who will be working in the world of industries and in the technical and vocational areas in the future, needed something to see for them to learn best. It implies therefore that these students do adhere to the famous saying *"To see is to believe"*.

In addition, the above finding shows that the students prefer teachers who use the board or overhead projector while they lecture. Based from the answers of the respondents, they tend to study and understand the concepts of their course if they have a reading material or any visual aid for them to visualize the content of the subject which made them visual learners in nature. This was supported by Mowshowitz (2009) in her paper "Teaching

Scientific Concepts & Problem Solving" stressing out that diagrams and pictures are very helpful, both to the teachers and to the students. A diagram helps the students because it can convey relationships that are almost impossible to put into words. It helps the teacher, because he can refer to it over and over.

On the contrary, kinaesthetic learning is the least learning style (18 or 9.78%) displayed by the senior high school students. This could due to the fact that kinaesthetic learning requires movements not only of the hand but with the coordination of the whole body and most importantly the brain. Kinaesthetic learning requires the simulation of the things or responses created by the brain which needs tangible results and actual performances and it is rare and hardly practiced by the students. Since concepts, theories and principles are merely taught in the senior high school subjects, it is difficult for the learners to administer performance – based activities unlike physical education subjects and subjects at their major fields of specialization that require movements. Kinaesthetic learners are suspected to be bored when the classroom set up is more on plain discussions and no activities are administered because merely discussion does not fit to their learning style. It indicates then that there must be an appropriate and varied approach or teaching strategy for the kinaesthetic learners since there is a diversity of the learners of the senior high school and kinaesthetic learners are always present.

Above result was confirmed by Regalado et.al. (2017) in their study concluding that majority of the senior Bachelor of Elementary Education students were visual learners and least were kinaesthetic learnners. Abrenilla et.al. (2017) supported such findings stating that most of the pupils preferred to be visual while least was kinaesthetic.

Table 3. Attitude towards Learning of the Senior High School Students of Abra State Institute of Sciences and Technology

Indicators	Mean	Descriptive Rating (DR)
1. There will always be something new to learn for as long as I live.	3.39	SA
2. I'm not afraid to commit mistakes as long as I learn from them.	3.39	SA
3. I take advantage of every opportunity to learn.	3.20	SlA
4. I Take charge of my own learning.	2.98	SlA
5. I am very willing and eager to learn.	3.33	SA
6. I am grateful to teachers who demand quality and excellence for effective learning.	3.36	SA
7. I have made it habit to set my personal learning goals.	3.21	SlA
8. I find time to check my progress against my personal learning goals.	3.17	SlA
9. I give my best in everything I am asked to do in order to learn.	3.42	SA
Over-All Mean	**3.27**	**SA**

Norm:

Point Value	Statistical Limits	Descriptive Rating (DR)	Interpretation
4	3.25 – 4.00	Strongly Agree (SA)	Extremely Positive
3	2.50 – 3.24	Slightly Agree (SlA)	Moderately Positive
2	1.75 – 2.49	Slightly Disagree (SlD)	Moderately Negative
1	1.00 – 1.74	Strongly Disagree (SD)	Extremely Negative

Table 3 shows that the attitude and beliefs towards learning of the Senior High School has a computed mean of 3.27 described as "Strongly Agree". This indicates that the senior high school students have an extreme positive attitude towards learning. This result was supported by their responses on indicator number 9 "I give my best in everything I am asked to do in order to learn." which appeared to have the greatest mean rating ($x = 3.42$) described as "Strongly Agree" followed by indicator number 1 "There will always be something new to learn for as long as I live." ($x = 3.39$) and indicator number 2 "I'm not afraid to commit mistakes as long as I learn from them." ($x = 3.39$), both described as "Strongly Agree". The students showed that they have an extreme positive attitude on the different learning indicators. This implies that their positive attitude towards learning could due to the fact that that they view education as an important part in achieving success and a tool against poverty. When students see the importance of things around them for themselves, they tend to develop positive attitude towards it. In the study of Chung and Huang (2010), and Sayadian and Lashkarian (2010), they found out that positive attitude towards English stem from students' awareness of its importance and the instrumental role it plays in their lives.

Moreover, the positive attitude towards learning of the senior high school may also due to varied classroom activities given by teachers which involve them and developed their interest in learning the different subject matters. According to OECD Learning for Tomorrow's World (2004) students are most likely to initiate high quality learning, using various strategies, if they are well motivated, not anxious about their learning and believe in their own capacities. Learners are only willing to invest such effort if they have a strong interest in a subject or if there is a considerable benefit, in terms of high performance, with learners motivated by the external reward of performing well. Thus, students need to be willing to learn how to learn.

Additionally, Peterman and Kennedy (2003) argue that students' involvement in classroom activities, their exposure to materials and practices, and increased participation are some of the factors that increase positive attitudes. They also found out that negative attitudes stem from unfavorable issues experienced by learners. Negative learning experiences were found to develop as a result of students' perception of their teachers' attitudes and behavior, evaluations design, courses, and shortage of materials.

To further elaborate students' attitude towards learning, table 2 revealed that indicator number 9 stating that "I give my best in everything I am asked to do in order to learn" appeared to have the highest mean (x = 3.42) described as "strongly agree". This means that students are determined to do all the learning tasks that may include projects, assignments, and reports given by teachers for them to learn. Further, they see that doing less or doing everything for education may directly affects their learning. They value education and see the importance of learning and its application to their lives and to their future. In support to this result, Teaching Excellence and Educational Innovation, Carnegie Mellon University (2008) stated that students are motivated to work if they know what goals they are working towards. They study harder if they see the value of what they are learning to their overall course of study. Students are more likely to exert effort in a course if they anticipate an eventual payoff in terms of their future professional lives.

In contrast, indicator number 4 "I take charge of my own learning." has the lowest computed mean (x = 2.98) described as "slightly agree". This implies that the students still need others to be more motivated and make their learning meaningful. Teachers should always motivate students in participating classroom activities and discussions for them to have greater ownership of their learning. This was supported by Watson (2015) stating that the more ownership of the learning handed over to students, the more engagement it will have. If the tasks given to students are irrelevant, twice the effort is needed to get kids to participate, and not going to get any energy back from them. Kids need to have a meaningful purpose for their work just like teachers do. They need to believe that the tasks they do make a difference beyond the four walls of the classroom. Student engagement comes naturally when kids identify a need or problem in the world and create ways to use skills that has been taught to them to solve those problems.

Table 4. ANOVA Summary Table Showing the Differences in the Attitude of the Senior High School Students of ASIST when Grouped According to Multiple Intelligences

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Multiple Intelligences	5.633	8	0.704	2.467	0.014	1.980
Within Multiple Intelligences	63.067	221	0.285			
Total	68.700	229				

Table above shows that the mean scores given by the senior high school students in measuring their attitude towards learning was significantly different from each other when grouped according to multiple intelligences. This was supported by the F-computed value of 2.467 which was greater than the F-critical value of 1.980 with a related probability of 0.014 ($p<0.05$). Thus, there existed significant differences in the scores provided by respondents. Further, this means that there are group of students who display higher or lower level of attitude towards learning when grouped according to multiple intelligences.

Table 4a. Scheffe Test Showing the Differences in the Attitude of the Senior High School Students of ASIST When Grouped According to Multiple Intelligences

Multiple Intelligence	Math	Mus	Spa	Kin	Inter	Intra	Natu	Exist
Linguistic	0.727	-1.103	0.488	-1.428	1.408	0.339	-0.204	-1.279
Mathematical	-	-1.687*	-0.317	-1.994	0.561	-0.524	-0.996	-1.844*
Musical	-	-	1.671*	-0.430	2.514*	1.758*	1.252	-0.013
Spatial	-	-	-	-1.982*	0.978	-0.220	-0.808	-1.932*
Kinaesthetic	-	-	-	-	2.771*	2.119*	1.670*	0.523
Interpersonal	-	-	-	-	-	-1.271	-1.818*	-2.778*
Intrapersonal	-	-	-	-	-	-	-0.715	-2.212*
Naturalist	-	-	-	-	-	-	-	-1.722*

S* = 1.511

Table above revealed that there existed significant difference in the attitude of the students when grouped according to multiple intelligences as evidenced by computed mean differences that is higher than the Scheffe value of 1.511.

Students who possess logical – mathematical intelligences appeared to have lower level of attitude as compared to students who possess musical intelligence (mean difference = -1.687) and existential intelligence (mean difference = -1.844). Likewise, significant difference existed to students, who possess musical intelligences and students with spatial intelligence (mean difference = 1.671), interpersonal intelligence (mean difference = 2.514), and intrapersonal intelligences (mean difference = 1.758). The positive sign of the mean differences imply that students who possessed musical intelligence has higher level of attitude towards learning as compared to spatial, interpersonal, and intrapersonal intelligence.

Respondents possessing spatial intelligences tend to have lower level of attitude than of the students possessing kinaesthetic intelligence (mean difference = -1.982) and existential intelligence (mean difference = -1.932). On the other hand, the positive sign of the computed mean difference of interpersonal intelligence (2.771), intrapersonal intelligence (2.119), and naturalist intelligence (1.670) showed that students who possess these intelligences have lower level of attitude towards learning than that of kinaesthetic intelligence possessed by other group of students.

Students who claimed to possess naturalist intelligence (mean difference = -1.818) and existential intelligence (mean difference =-2.778) displayed a more positive attitude towards learning as compared to students possessing interpersonal intelligence. Result was supported by computed mean differences that are higher than Scheffe value of 1.511. Significant difference also existed between group of students who possess existential intelligence, intrapersonal intelligence (mean difference = -2.212) and, naturalist intelligence (mean difference = -1.722). The negative sign of the computed mean differences implies that those learners possessing existential intelligence appeared to have a more positive attitude towards learning as compared to those learners who possess intrapersonal intelligence and naturalist intelligence.

Furthermore, students show different attitude towards learning when grouped according to multiple intelligences. This means that as respondents display differences on their interests and cognitive abilities, their level of attitude towards learning is affected. Gardner (1991) says that these differences "challenge an educational system that assumes that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student learning. Students learn in ways that are identifiably distinctive. Furthermore, he added that the theory of multiple intelligences has emerged from cognitive research and that it documents the extent to which students possess different kinds of minds and therefore learn, remember, perform, and understand in different ways. Intelligence affects one's learning style and its nature, technique and quality, in a positive way.

Table 4b. ANOVA Summary Table Showing the Differences in the Attitude of the Senior High School Students of ASIST when Grouped According to Learning Styles

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Learning Styles	3.868	2.000	1.934	6.881	0.001	3.046
Within Learning Styles	50.591	180.000	0.281			
Total	54.459	182				

Table above revealed that there existed highly significant differences in the scores provided by the students in measuring their attitude towards learning when grouped according to learning styles. This was evidenced by the F-computed value of 6.881 which was less than the F-critical value of 3.046 with a related probability of 0.001 ($p<0.01$). This implies therefore that there are group of students who display a higher or lower level of attitude towards learning when grouped according to learning styles.

According to Felder and Brent (2005) in their "Understanding Student Differences", they found out that students have different levels of motivation, different attitudes about teaching and learning, and different responses to specific classroom environments and instructional practices. The more thoroughly instructors understand the differences, the better chance they have of meeting the diverse learning needs of all of their students.

Table 4c. Scheffe Test Showing the Differences in the Attitude of the Senior High School Students of ASIST When Grouped According to Learning Styles

Learning Styles	Auditory	Kinaesthetic
Visual	2.694*	2.897*
Auditory	-	0.523

S* = 2.468

Table above revealed that there existed significant difference in the attitude of the group of students who claimed to be visual and the group who claimed to be auditory (mean difference = 2.694). This was supported by the computed mean difference that is higher than the Scheffe value of 2.468. The positive sign of the mean difference denote that students under the visual learning style displayed a more favorable level of attitude as compared to auditory learners.

Furthermore, significant difference also existed between the attitude of visual learners the group of students who are kinaesthetic learners (mean difference = 2.897). Again, the positive sign of the mean difference implies that students who are visual learners demonstrated a higher level of attitude towards learning as compared to kinaesthetic learners.

Table 5. Performance of the Senior High School Students of Abra State Institute of Sciences and Technology Grouped According to Multiple Intelligence

Multiple Intelligence	Mean	Descriptive Rating (DR)
Linguistic	84.05[a]	S
Mathematical	82.75[a]	S
Musical	83.35[a]	S
Spatial	81.23[a]	S
Kinaesthetic	82.68[a]	S
Interpersonal	82.21[a]	S
Intrapersonal	82.81[a]	S
Naturalist	83.35[a]	S
Existentialist	83.68[a]	S
As a Whole	**82.90**	**S**
F-Value		0.587
F-Critical Value		1.980
F-Probability		0.788
Interpretation		Not Significant

Note: Means of the same letters are not significant
Norms:

Statistical Limits	Descriptive Rating (DR)
93.75 and above	Excellent (E)
87.50 – 93.74	Very Satisfactory (VS)
81.25 – 87.49	Satisfactory (S)
75.00 – 81.24	Fair (F)
74.99 and below	Poor/Needs Improvement (P/NI)

As presented on table 5, the academic achievement of the senior high school students when grouped according to multiple intelligences has an overall computed mean of 82.90 described as "satisfactory". This means that students still need to strive harder in their studies in order to improve their performance. Further, there was no significant difference on the students' performances when grouped according to multiple intelligences. This implies that whether the students possess linguistic, mathematical, musical, or any of the multiple intelligences, it has nothing to do with their performance. Such finding was evidenced by the computed F-value (0.587) lower than the critical value (1.980).

Table 5a. Performance of the Senior High School Students of Abra State Institute of Sciences and Technology Grouped According to Learning Styles

Learning Styles	Mean	Descriptive Rating (DR)
Visual	83.32[a]	S
Auditory	82.79[a]	S
Kinaesthetic	82.58[a]	S
As a Whole	**82.90**	**S**
F-Value		0.176
F-Critical Value		3.046
F-Probability		0.839
Interpretation		Not Significant

Note: Means of the same letters are not significant
Norms:

Statistical Limits	Descriptive Rating (DR)
93.75 and above	Excellent (E)
87.50 – 93.74	Very Satisfactory (VS)
81.25 – 87.49	Satisfactory (S)
75.00 – 81.24	Fair (F)
74.99 and below	Poor/Needs Improvement (P/NI)

Table 5a above shows the performance of the senior high school students when grouped according to learning styles. Their performance has an overall computed mean of 82.90 described as" satisfactory". There was no significant differences of students' performance when grouped according to learning styles as supported by the computed F-value (0.176) lower than the critical value (3.046). This implies that whether the student is an auditory, visual, or kinaesthetic learner, it does not affect their academic performance.

Table 6. Correlation Coefficient Showing the Relationship Between the Attitude and Level of Performance of the Senior High School Students of Abra State Institute of Sciences and Technology.

Respondents When Grouped According to	r - value	r - prob	Decision
Multiple Intelligence			
Linguistic	0.250 **	0.001 (p<0.01)	Significant
Mathematical	0.233 **	0.006 (p<0.01)	Significant
Musical	0.256 **	0.001 (p<0.01)	Significant
Spatial	0.253 **	0.001 (p<0.01)	Significant
Kinaesthetic	0.251 **	0.001 (p<0.01)	Significant
Interpersonal	0.252 **	0.003 (p<0.01)	Significant
Intrapersonal	0.247 **	0.001 (p<0.01)	Significant
Naturalist	0.247 **	0.001 (p<0.01)	Significant
Existentialist	0.224 **	0.003 (p<0.01)	Significant
As a Whole	**0.227** **	**0.002 (p<0.01)**	**Significant**
Learning Style			
Visual	0.227 **	0.002 (p<0.01)	Significant
Auditory	0.249 **	0.002 (p<0.01)	Significant
Kinaesthetic	0.234 **	0.003 (p<0.01)	Significant
As a Whole	**0.227** **	**0.002 (p<0.01)**	**Significant**

Table 6 revealed the relationship between students' attitude towards learning and their performance when grouped according to multiple intelligences and learning styles. Students' attitude whether grouped according to multiple intelligences or according to learning styles, showed significant relationship to their academic performance as supported by the overall computed r-value (0.227) higher the the p-value (0.002). This means that the more positive attitude the students have the higher their academic performance.

CONCLUSIONS

Based from the results and findings of the study, the following conclusions were drawn:

1. Senior high school students in the technical – vocational learning track of Abra State Institute of Sciences and Technology were strongest in existentialist intelligence while weakest in logical-mathematical intelligence.
2. Senior high school students in the technical – vocational learning track of the Abra State Institute of Sciences and Technology were visual learners.
3. The respondents have an extremely positive attitude in the different learning indicators.
4. The respondents have different levels of attitude towards learning when grouped according to multiple intelligences and learning styles.
5. There were no significant differences of the students' academic performance when grouped according to multiple intelligences and learning styles.
6. The level of attitude towards learning of the students significantly affects their academic performance.

RECOMMENDATIONS

From the conclusions drawn in this study, the researchers recommend the following:

1. Since the respondents were dominant in existentialist intelligence and that existentialists learn best when they are in control of their own learning, teachers must provide activities that may require them to work individually or collaboratively to stimulate their creativity, critical thinking ability and giving more chances to express themselves.
2. Since the respondents were weakest in logical -mathematical intelligence, teachers must guide the students in recognizing their own multiple intelligences trend and improve the intelligences where they are found to be weak for them to be developed holistically.
3. Because majority of the respondents were visual learners and that they process information according to what they see, these are some great ways to keep them engaged in learning: use computer graphics and cartoons when you can, let them see statistics through graphs, maps, and charts, and give your students graphic organizers to see their projects and assignments.

4. There is a need also for the teachers give more attention to auditory and kinesthetic learners since they were found to have displayed a less favorable level of attitude towards learning. Follow up is needed to their study habits.
5. Since respondents have an extremely positive attitude towards learning, teachers are still encouraged to continue motivating students by involving them in classroom activities, exposing them to materials and practices, and increased participation to maintain and even improve their positive attitudes.
6. Regular assessment and evaluation to the multiple intelligences, learning styles, attitude towards learning, and the academic performance of the students should be monitored so that instant remediation can be done by teachers for the improvement of the learners.
7. As an outgrowth of the study, a follow up study is hereby recommended not only to the senior high school but to all the students of the Abra State Institute of Sciences and Technology.

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STUDENTS' RECEPTIVE SKILLS VIS-À-VIS PERFORMANCE AND BEHAVIOR

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ABSTRACT

This study evaluated the learners' behavior and performance towards receptive skills, reading and listening. It also determines the relationship of listening and reading skills as well as their behavior and performance toward the said skills. This is a descriptive study utilizing a survey design with seventy (70) Grade 10 students as respondents. Adapted test questionnaires were the main instruments used to gather data. These data were analyzed using percentage, Weighted Mean, Frequency of Correct Responses and the Pearson Product-Moment Correlation. Findings revealed that the respondents' got an average score of 60.08 in listening skill and 50.26 in reading skill. Both are described as Average Mastery indicating a 35% to 65% mastery of the skills considered. Both learners' listening and reading behavior were described as sometimes implying that they have manifested 40% to 69% positive/active behavior. Moreover, some wander their mind if the speaker doesn't engage their interest; they need the speaker to be more engaging to sustain their focus. Likewise, the learners' reading behavior is contingent on the content of the text; they stop reading when they find the text uninteresting. Statistically, a low positive and significant correlation exist between the learners' listening and reading skills. Similarly, the reading behavior and performance are significantly correlated, while listening behavior and performance have a moderate positive and significant relationship. Therefore, teachers should employ meaningful and enjoyable enhancement activities to influence students to have a positive listening and reading behavior. Consequently, learners' receptive skills will be improved.

Keywords: ***English Language Teaching, Receptive Skills, Enhancement Activities, Descriptive Research, Moalboal, Cebu, Philippines.***

INTRODUCTION

English language has been considered as the language of globalization and the language of global culture and international economy (Alonso, 2012). Hence, the increasing demand of its linguistic competence has placed the substantive emphasis on English teaching in the Philippine educational system. Aydogan and Akbarov (2014) explained that the concepts of English skills; listening, reading, writing and speaking, have long been used by language educators. Harmer as quoted by Alonso (2012) further mentioned that these skills are divided into two. Receptive skills include listening and reading while productive skills are speaking and writing. Receptive skills are used to receive, process, and comprehend the information and details without producing a language. Productive skills require the production, for instance, a speech.

Studies revealed that productive skills are the outcome of extensive exposure to receptive skills. According to Tarackcioglu and Yuce (2013) from the Journal of International Social Research, receptive skills are the first stepping stones to the improvement of the foreign language skills. Moreover, in a study akin to Schroeders et al. (2010) said that receptive skills have a fundamental role in the second language (L2) acquisition. Significantly, Al- Jawi (2010) states that there is a relatively slow process in transferring linguistic knowledge from receptive to productive; however, it does still take place. He concluded that a rich exposure to listening and reading is required to attain mastery and proficiency in natural production.

Unfortunately, the necessity of teaching and enhancing the students' receptive skills are not fully addressed in the classroom language instruction. Bozorgian (2012) found out that listening, though the heart of language learning, is the least understood and least researched skill in language learning and is often disregarded by foreign and second language instructors. Accordingly, Hughes (2010) stressed there are language learners who are experiencing problems in detecting distinctive speech sounds, poor listening ability, easily disturbed to external noise, poor articulation of sounds and difficulty in discriminating sounds. In addition, Sebag (2001) observed that there are students who could not read well. It is also alarming to know that there are students who read by syllables. This is parallel to the finding of Escuadro (2013) that there is a need to improve the reading skill of the students.

Moreover, another problem found in learning the target language, English, is the negative behavior of the students (Al- Jawi, 2010). He stated that students have negative expectations towards the material. They already prejudged that they are not going to understand the prepared materials because such materials are expected to be difficult. This idea is supported by Alonso (2012) explaining that students believe that English is not their mother tongue and least important to be used daily. In result, they neither speak nor use English outside the classroom.

The necessity to evaluate the students' receptive skills encouraged the researcher to conduct this study. The previous studies on receptive proficiency in English as a foreign language measure the students' performance and analyze the effective ways of improving these skills (Al-Jawi 2010, Alonso 2012, and Tarakcioglu and Yuce 2013); however, this present study also investigates the learners' behavior in the said skills and the relationship of listening and reading skills which make it different from that of other researches.

OBJECTIVES

This study aimed to:

1. evaluate the students' listening performance as to auditory discrimination and listening comprehension and reading performance in terms of scanning, skimming, making inference and contextual analysis;
2. assess the students' perceived behavior in listening and reading; and
3. determine the significant relationship between listening and reading skills as well as the students' performance and behavior toward the said skills.

METHODOLOGY

This study utilized the descriptive survey method in gathering the needed data. Using a simple random sampling, the seventy (70) Grade 10 students from Badian District, Cebu were identified as respondents. The students' performance specifically in listening, auditory discrimination and listening comprehension are measured. These are both adopted from the research of Mohammed (2005). For the reading skill, it includes skimming, scanning, making inferences and contextual analysis which are taken from Go and Pocesion (2010). Generally, the researcher used an adapted questionnaire from Go and Posecion (2010) to obtain data.

The data on the students' behavior towards receptive skills were gathered using two adapted sets of survey questionnaire. For listening, the adapted online listening practical test from www.quendom.com was administered, and the other questionnaire was adapted from Rahman (2004) for reading.

The students' performance in listening and reading skills was determined through Frequency of Correct Response and the Mean Percentage Score. It was scaled as: 0% - 4% = Absolutely No Mastery; 5% - 14% = Very Low Mastery; 15% - 34% = Low Mastery; 35% - 65% = Average Mastery; 66% - 85% = Moving towards Mastery; 86% - 95% = Closely Approximating Mastery; and 96% - 100% = Mastered. Also, the students' perception of listening and reading as manifested to their behavior was answered through Weighted Mean. It was interpreted as: 1.00 – 1.79 = Never, 1.80 – 2.59 = Rarely, 2.60 – 3.39 = Sometimes; 3.40 – 4.19 = Often; and 4.20 – 5.00 = Always. To find out the significant relationship between the students' performance and perception levels as well as the listening and reading skills, the Pearson Product- Moment Correlation was used respectively.

RESULTS AND DISCUSSION

Students' Performance in Listening

Figure 1 shows the students' performance in listening based on auditory discrimination and listening comprehension. Apparently, auditory discrimination has an equivalent MPS of **63.86%** interpreted as **Average Mastery** or **35% to 65%** mastery. Students still need to practice the phonological domain of English since mastery is the goal of every language instruction. They could have heard the words having similar sounds, but they struggle to distinguish the distinct sounds in English. Their mother tongue, Cebuano, is a factor to consider; they are used to hear the hard sounds and do not practice the soft sounds. The result agrees with Go and Pocesion (2010) that words that are the same except for one sound may confuse the listener who cannot discriminate these different sounds. Hence, Hughes (2010) said that students who have problems in identifying speech sounds and discriminating similar words should be strengthened.

Similarly, listening comprehension has an equivalent MPS of **60.29** which falls under **Average Mastery** or **35% to 65%** mastery. When listening to a given selection, students have difficulty in understanding and analyzing the whole discussion. They are used to hear Cebuano words in most of their time, and they seldom use the English language; this could result in an average performance. Thus, it reveals a need for improvement of this skill to achieve mastery. Since comprehension sustains effective communication, teachers should strengthen the students' cognitive domain especially in listening to English discussions to help them practice the target language (Alonso, 2012).

Generally, the students' listening skill is described as **Average Mastery** or **35% to 65%.** These data simply mean that there is a need to enhance the students' listening ability. Voronina (2007) shows a graph showing that listening has 50% time spent compared to other skills. Thus, listening is the most used skill among the language skills. Mohammed (2005) also stated that in developing the students' listening capacity, their ability to become more independent is also improved. The teacher should provide meaningful and appropriate tools and exercises to help learners improve this skill.

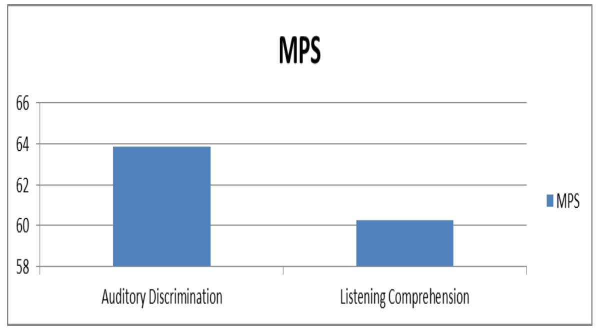

Figure 1. Students' Performance in Listening Skill Measuring Auditory Discrimination and Listening Comprehension

Students' Performance in Reading

Figure 2 indicates the students' performance in reading as to scanning, skimming, making inference, and contextual analysis. Out of the four sub-skills tested, scanning has the highest equivalent MPS of **69.90** which is described as **Moving towards Mastery** or **66% to 85%** mastery**.** This reveals that students can easily locate the specific terms, keywords or phrases in the text. They skip over a larger amount of material and only focus on particular information that is asked. This is parallel with the study of Maxwell as quoted by Schroeders et al. (2010) that students performed better on scanning exercises and commented that they preferred to scan for answers-to-factual questions.

Skimming has an equivalent MPS of **47.00** described as **Average Mastery**. It signifies that students have a hard time previewing and getting the main idea of the reading material. This is because of the students' time spent in reading English text. Their amount of time in reading leads to an average performance. The result is supported by Schroeder et al. (2010) that many students are unable to skim for the gist of the selection and students prefer to scan for details than skim for main ideas. It simply means that they have to sharpen more this skill to achieve mastery and teachers should provide tools or activities to help them.

The next sub-skill is Making Inference. It has an equivalent MPS of **41.57** and is described as **Average Mastery** or **35% to 65%** mastery. Since the aim of every language instruction is mastery, students should enhance the skill of identifying the implied concept from the given context. Thorndike, as stated by Rhaman (2004), spelled out that inference makes it possible for a reader to comprehend the information which the author presented and is an integral part of the comprehension, of the memory, and of the text.

As presented, contextual analysis has an equivalent MPS of **42.57** described as **Average Mastery** or **35% to 65%** mastery**.** The figures showed that students found the test difficult in getting the closer meaning of unfamiliar words. This would now signify that students still have to improve their contextual analysis for them to gain mastery. This is akin to the idea of Homada as mentioned by Sebag (2001) stating that the causes of reading comprehension failures are insufficient exposure and unfamiliarity with text features. He then concluded that competence in vocabulary has a relationship to the reading comprehension.

Therefore, the students' reading skill is described as **Average Mastery** or **35%** to **65%** mastery. Based on the result, there is a need to improve the students' reading skill. To achieve such, language teachers should provide interactive activities and useful tools. Reading helps build and expand vocabulary and is useful in constructing new knowledge (Golbin, 2017). Spencer and Guillaume as mentioned by Tarakcioglu and Yuce (2013) also emphasized the importance of building lexical competence to improve literacy.

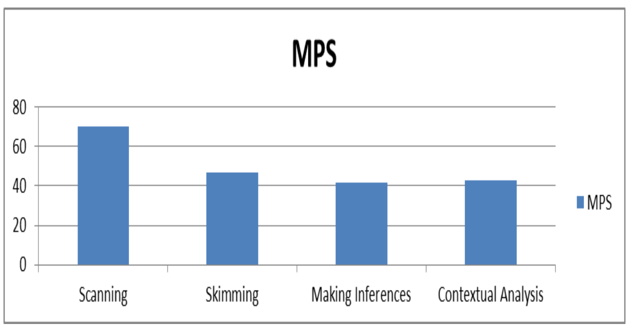

Figure 2: Students' Performance in Reading specifically in Scanning, Skimming, Making Inferences and Contextual Analysis

Summary of the Respondents' Performance in Receptive Skills

The table below shows the summary of the respondents' performance in receptive skills. Generally, it has an MPS of **54.20** interpreted as **Average Mastery** or **35% to 65%** mastery. It indicates that students need to improve their receptive skills to achieve mastery of the target language. Tahar (2013) explains that enhancing the receptive skills develops the competency of interpreting oral and written text. Furthermore, Bowler and Parminter as quoted by Tahar (2013) made a simple equation which represents the students' ability to read and listen successfully: text level of challenge + task level of support= student success. Therefore, teachers should provide varied learning strategies and meaningful assessment tools to get the students motivated.

Table 1. Summary of the Respondents' Performance in Receptive Skills

Variables			Students (70)	
			MPS	**Description**
Receptive Skills	**Listening Skill**	Auditory Discrimination	63.86	Average Mastery
		Listening Comprehension	60.29	Average Mastery
	Reading Skill	Scanning	69.90	Moving Towards Mastery
		Skimming	47.00	Average Mastery
		Making Inference	41.57	Average Mastery
		Contextual Analysis	42.57	Average Mastery
Average			**54.20**	**Average Mastery**

Students' Perceived Behavior in Receptive Skills

The figure 3 below shows the students' behavior towards receptive skills. Based on the figure, the students' listening and reading behavior got an average weighted mean of **3.12** and **3.28** which were described as **sometimes**. This would mean that positive/active behaviors are sometimes observed from the students. It is also found out that students find it hard to sustain their focus in listening when the speaker doesn't get their interest. They wanted that speaker should be more engaging to catch their attention. Likewise, their reading behavior is contingent on the text. They stop reading when they find the text uninteresting.

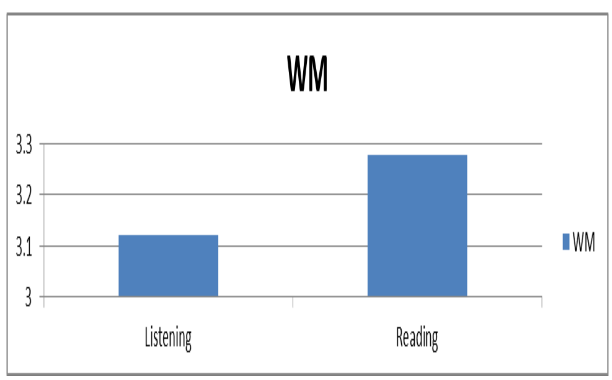

Figure 3: Students' Behavior towards Receptive Skills

Mohammed (2005) warned the educators that motivation, behaviors, and attitude of the students are indirectly observed but must be kept in mind for they are the key elements in language learning and have a strong influence on language performance. Also, Al-Jawi (2010) further pointed out that part of the teachers' job is to create a positive atmosphere in reading. They have to provide interesting and appropriate teaching aids and scaffold the learners when doing receptive tasks.

Test of Significant Relationship

Table 2 reveals that there is a significant relationship between the respondents' performance and perception of the aforementioned receptive skills and between listening and reading skills. This further implies that both skills, listening and reading, were significantly correlated. Thus, one skill would affect the other. If a student performs well in one skill, he is also expected to perform well in the other skill; if he has a poor performance in one skill and so has the other. This is similar to Tahar's (200) observation that when learners become more and more interested and motivated, the progress is also a little bit more significant; it means more learners got better results. Moreover, Aydogan and Akbarov (2014) stated that whole-language theoreticians strongly implied that all aspects of language were interrelated and intertwined.

Table 2. Significant Relationship on Respondents' Performance and Perception of the Aforementioned Receptive Skills

Variables	r value	P value	Alpha Value	Decision	Remarks
Listening Performance Listening Behavior	0.551	0.000	0.05	Reject H_o	Significant Relationship
Reading Performance Reading Behavior	0.309	0.009	0.05	Reject H_o	Significant Relationship
Listening Skill Reading Skill	0.461	0.000	0.05	Reject H_o	Significant Relationship

CONCLUSION

Based on the findings of the study, the following conclusions have been made:

1. Students' behavior in receptive skills, listening and reading, affects their performance toward the said skills.
2. Listening and reading skills are having a significant correlation.
3. There is a need to improve the students' performance in receptive skills, listening and reading skills.
4. The students' passive behavior in listening and reading should be changed to active and positive.

RECOMMENDATION

In consideration of the findings and conclusion arrived at, the following recommendations are hereby offered:

- Language teachers should employ meaningful and enjoyable enhancement activities through cooperative learning and active learning experiences in the teaching process to influence students to have a positive listening and reading behavior to improve their receptive skills' performance.
- Teachers should evaluate the students' linguistic skills and provide extended learning experiences to those who have difficulty in listening and reading skills.
- School administrators should provide full support for the acquisition of instructional materials to be used in classroom language instruction.

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The Researcher

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IMPLEMENTATION OF LIVESTOCK DISPERSAL PROGRAM AND BENEFICIARIES' SATISFACTION: BASIS FOR INTERVENTION

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ABSTRACT

This is a descriptive-correlational study aimed at ascertaining the influence of the implementation of livestock dispersal program on the satisfaction of beneficiaries so that an intervention program could be proposed based on the findings. Respondents were beneficiaries of the Livestock Livelihood Program (LLP) during the last three years of implementation. All in all, there were 300 samples who were randomly selected to respond to the survey. Results showed that the implementation of the livestock dispersal program was very extensive in the overall and that beneficiaries of the program were very highly satisfied. Also, it was found that the relationship between the implementation of LLP and the satisfaction of beneficiaries was significant besides being positive and strong. In addition, it was revealed that capacity-building of beneficiaries, project management and execution, and other extension services have a significant influence on the satisfaction of beneficiaries with the program. In view of the results, an enhancement program was proposed for the improvement of the Livestock Livelihood Program (LLP).

Keywords: ***Public Administration***; ***Livestock Livelihood Program***, ***Satisfaction***; ***Panabo City***; ***University of Mindanao***, ***Philippines***

INTRODUCTION

Livelihood projects have been the backbone of support for the less fortunate sector of society. The prime purpose of livelihoods all over the world is to alleviate the incidence of poverty. However, surveys have found that not all beneficiaries are satisfied with livelihood projects, especially in the timeliness of deliveries, the discrepancy between what the beneficiaries wanted, and the types of materials or livestock provided (Food and Agriculture Organization, 2010). Since the inception of livelihood programs up to the present, their implementation has been facing serious problems and criticisms since they fail to alleviate poverty, and more failed in satisfying the expectations of beneficiaries (Agbayani and Siar, 1994). Evidence to this is the poverty incidence among Filipinos. In 2015, poverty incidence was estimated at 21.6 percent, and subsistence incidence was estimated at 8.1 percent (Philippine Statistics Authority, 2016).

Notwithstanding the issues faced in the implementation of livelihood programs, the government is still bent on helping the poor by introducing more of these programs. In fact, the Sustainable Livelihood Program (SLP) of the Department of Social Welfare and Development (DSWD) has served a total of 723,090 families since its implementation in January 2015 up to April 2016 (DSWD, 2016).

In Panabo City, the Local Government has embarked on a Livestock Dispersal Program (LDP) as a poverty alleviation program for the community, just as it is also implemented all over the country (Roldan, 2007; Unson, 2015). Panabo LGU has dispersed swine with affixed feed component, goats with pasture seeds and seedlings tied with it, cattle with corresponding pasture seeds and seedlings tied with it, cattle with corresponding pasture seeds and seedling for sustained food availability. The beneficiaries were those whose income were below the poverty threshold. The annual report on the livestock dispersal program (LDP) by the City Agriculture Office of Panabo showed a 10 to 25 percent incremental income of the beneficiaries after having been enrolled in the program.

Despite the length of time that the Livestock Dispersal Program has been operating, and the incremental revenues of the beneficiaries enrolled in the program, the researcher has not found a study that investigates the relationship between the implementation of the said project and the satisfaction of beneficiaries at least in Panabo City. Hence, this study is conducted.

Findings of this study will benefit the administrators of livelihood programs. They may consider satisfaction of beneficiaries as an agenda in the implementation of livelihood programs or in the program enhancements.

STATEMENT OF THE PROBLEM

The main objective of this study was to determine the indicators of the livestock dispersal program that can best predict the satisfaction of the program beneficiaries. The study also sought answers to specific questions:

1. What is the implementation level of the livestock dispersal program in Panabo City?
2. What is the satisfaction level of the beneficiaries on the livestock dispersal program in Panabo City?
3. Is there a significant relationship between the implementation level of the livestock dispersal program and the satisfaction level of beneficiaries?
4. Which among the indicators of livestock dispersal program best predicts satisfaction of beneficiaries?
5. What can be proposed as an intervention programbased on the findings of the study?

Theory

Many researchers have acute views about poverty alleviation strategies of governments (Ghatak, 2014; Davis and Sanchez-Martinez, 2015). This study, however, found its underpinning on the theory of poverty and anti-poverty (Bradshaw, 2006). This theory contended that people can get out of poverty if governments will help them by introducing community development programs and projects. This is well supported by The Household Livelihood Security Concept espoused by Frankenberger and McCaston (1998) which claimed that livelihoods can be made up of a range of on-farm and off-farm activities which together provide a variety of procurement strategies for food and cash.

Thus, each household can have several possible sources of entitlement which constitute its livelihood. These entitlements are based on the household's endowments and its position in the legal, political and social fabric of society (2). Moreover, Chambers (1989) averred that the risk of livelihood failure determines the level of vulnerability of a household to income, food, health and nutritional insecurity. Therefore, livelihoods are secure when households have secure ownership of, or access to, resources and income-earning activities, including reserves and assets, to offset risks, ease shocks and meet contingencies.

This study is also anchored on the SERVQUAL model of Parasuraman, Ziethaml, and Berry (1988), which is a multi-dimensional instrument that captures consumer expectations and perceptions. Applying SERVQUAL to the context of this study would explain that satisfaction of the livestock dispersal program beneficiaries is dependent on the fulfillment of their expectations and perceptions about the program.

Conceptual Framework

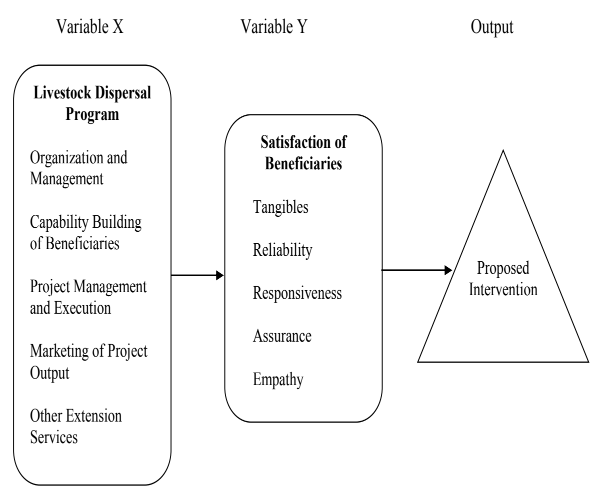

Figure 1. The Conceptual Framework of the Study

METHOD

This study was a quantitative non-experimental research that particularly employed a descriptive correlational design, with questionnaires as a tool in gathering information. Respondents to this study were the 300 beneficiaries of the livestock dispersal program from 40 barangays in Panabo City. Stratified random sampling was used in determining the number of respondents to be taken from each barangay to have proper representation.

Research Instrument

Question items for the independent variable were taken from the processes of Livestock Dispersal Program in Panabo City, whereas the questionnaire for the satisfaction of beneficiaries was patterned after the SERVQUAL Model of Parasuraman, Zeithaml, and Berry (1988). The questionnaires were subjected to a Cronbach's Alpha for content reliability and internal consistency. They were also submitted to a validation by experts.

FINDINGS

Implementation of Livestock Dispersal Program in Panabo City

Table 1 presents the overall result for the level of implementation of the livestock dispersal program in Panabo City. As shown, there is an overall high level of implementation of the program. This means that the respondents agreed that all components of the program were continuously and permanently applied by the agency concerned.

However, looking closely at the individual results, all other indicators of the program have very high level of implementation, except in the marketing of the outputs of the project. There means that respondents feel that there was a gap in the implementation of this component of the program.

In scrutinizing the responses in the questionnaire, it was revealed that the overall rating given by the respondents in the marketing of project outputs was high level only, and in one specific question, *the City Agriculturist's Office gives support for the marketing of the livestock*, was given a *moderate* response.

TABLE 1. LEVEL OF IMPLEMENTATION OF THE LIVESTOCK DISPERSAL PROGRAM IN PANABO CITY

Indicators	SD	Mean	Descriptive Level
Organizational Management	0.40	4.28	Very High
Capability Building for Beneficiaries	0.47	4.26	Very High
Project Management and Execution	0.41	4.25	Very High
Marketing of Output of the Project	0.46	3.51	High
Other Extension Services	0.46	4.26	Very High
Overall	**0.26**	**4.11**	**High**

This indicates that the respondents are often left on their own in marketing their products, which is quite a problem for some. The problems that the researchers found were: *one*, access to the market. Beneficiaries live on the outskirts of the city and are very far from the market. So, bringing their livestock to the market would entail a heavy burden to the beneficiaries especially in transporting their livestock; and *two*, price. The beneficiaries could not negotiate a better price for their livestock if they sell at an individual capacity; their livestock is usually sold at a bargain price. But if the agency could mediate in the selling, they could get a fair selling price.

Satisfaction of Livestock Program Beneficiaries in Panabo City

Table 2 displays the overall satisfaction level of beneficiaries of the livestock dispersal program in Panabo City. The data shows that the overall level of satisfaction is very high. Indicators reliability, responsiveness, and assurance got very high ratings, except for *tangible s*and *empathy*, which got only high ratings. The high rating given for tangibles means that the LDP beneficiaries are not always satisfied with the equipment for the program, its facilities, and materials. The inferior facilities may be due to budgetary restraint of the program, like in all livelihood programs (Bondoc & De Castro, 2010). Also, the high rating given for empathy means that the sponsoring agency has not fully understood the need of the beneficiaries, especially concerning their animals, whether in assisting for animal care or for marketing of their output.

TABLE 2. LEVEL OF SATISFACTION OF BENEFICIARIES OF THE LIVESTOCK DISPERSAL PROGRAM IN PANABO CITY

Indicators	SD	Mean	Descriptive Level
Tangibles	0.65	4.09	High
Reliability	0.48	4.31	Very High
Responsiveness	0.42	4.27	Very High
Assurance	0.43	4.30	Very High
Empathy	0.45	4.00	High
Overall	**0.37**	**4.18**	**High**

Significant Relationship between the Livestock Dispersal Program and Satisfaction of Beneficiaries

Table 3 displays the data on the significant relationship between the livestock dispersal program and the satisfaction of the are beneficiaries. The data showed that while the overall correlation result is significant and positive, it is also a strong relationship between the two variables, as evidenced by a correlation coefficient of .557, with a p<.001. The result suggests an almost locked-in relationship between the implementation of LDP and satisfaction of beneficiaries. This means that as the level of implementation increases, the satisfaction of beneficiaries also increases.

TABLE 3. SIGNIFICANT RELATIONSHIP BETWEEN THE LEVEL OFIMPLEMENTATION OF THE LIVESTOCK DISPERSAL PROGRAM AND LEVEL OF SATISFACTION OF THE BENEFICIARIES

Implementation of the Livestock Dispersal Program	Satisfaction of the Beneficiaries					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Overall
OM	.000 (.997)	.159* (.025)	.234** (.001)	.142* (.046)	.157* (.026)	**.168* (.017)**
CBB	.194** (.006)	.374** (.000)	.269** (.000)	.343** (.000)	.349** (.000)	**.396** (.000)**
PME	.316** (.000)	.421** (.000)	.373** (.000)	.316** (.000)	.319** (.000)	**.463** (.000)**
MOP	.074 (.297)	.063 (.379)	.041 (.566)	.061 (.388)	-.033 (.641)	**.058 (.414)**
OES	.430** (.000)	.253** (.000)	.464** (.000)	.420** (.000)	.465** (.000)	**.539** (.000)**
Overall	**.351** (.000)**	**.432** (.000)**	**.469** (.000)**	**.441** (.000)**	**.432** (.000)**	.557** (.000)

Legend:
OM = Organizational and Management
CBB = Capability Building of Beneficiaries
PME = Project Management and Execution
MOP = Marketing Output of the Project
OES = Other Extension Services

Closely examining the individual results, other extension services have a correlation coefficient of .539, with p<.001. This signifies a strong, positive and highly significant correlation. However, Project Management and Execution (PME) and Capability Building of Beneficiaries (CBB) have moderate relationship with beneficiaries' satisfaction, whereas Organizational Management (OP) has a very weak relationship with the beneficiaries' satisfaction, meaning, the level of implementation the livestock dispersal program may or may not be related to the satisfaction of beneficiaries.

On the other hand, the correlation result showed that Marketing of Output of the Project (MOP) has no significant relationship with beneficiaries' satisfaction. This indicates that whether the implementation of LDP is high or otherwise does not have anything to do with beneficiaries' satisfaction with the program. This may be since beneficiaries are often left to dispose or sell their livestock without the help of interference of the sponsoring agency.

Influence of the Livestock Dispersal Program on the Satisfaction of the Beneficiaries

TABLE 4. SIGNIFICANCE ON THE INFLUENCE ON THE LEVEL OF IMPLEMENTATION OF THE LIVESTOCK DISPERSAL PROGRAM ON THE LEVEL OF SATISFACTION OF THE BENEFICIARIES

Implementation of the Livestock Dispersal Program	Satisfaction of the Beneficiaries			
	B	β	*t*	*Sig.*
Organizational and Management (OM)	.001	.001	.025	.980
Capability Building of Beneficiaries (CBB)	.130	.166	2.799	.006
Project Management and Execution (PME)	.267	.303	4.988	.000
Marketing of Project Output (MPO)	-.050	-.062	-1.135	.258
Other Extension Services (OES)	.342	.432	7.547	.000
R .660				
R^2 .436				
F 29.970				
ρ .000				

Presented in table 4 is the result of the regression analysis, which determined the significant influence of the implementation of LDP on the satisfaction of the beneficiaries. The data showed that three of the five indicators have positive coefficients (b>0) that are also significant (p<0.01): CBB (b=.166; p<.006), PME (b=.303; p<.001), and OES (b=.432; p<.001).

Whereas, OM has a beta coefficient of .001, which is not significant having a p-value of .980. The result further revealed that the level of implementation of LDP can significantly influence the level of satisfaction of the beneficiaries by 43.6 percent. This suggests that 56.4 percent of the variance can be attributed to other factors not included in this study.

CONCLUSION

Based on the findings of this study, it was concluded that:

The overall level of implementation of the program is high only, which suggests that there is something in the program that has not been fully executed, and that the overall high level of satisfaction of the beneficiaries suggests that their expectations about the program have not been fully met. Moreover, the moderate uphill positive relationship between implementation of LDP and the satisfaction of beneficiaries, and the forty-four percent influence of the level of implementation of the livestock dispersal program on beneficiaries' satisfaction level significantly indicate that an enhancement in the implementation of the program is necessary.

RECOMMENDATIONS

The findings of the study brought forth these recommendations:

1. Updating of the status of existing livelihood beneficiaries.
2. Creating a market support service committee for the livestock dispersal program.
3. Lobbying for the passing of a city ordinance for the creation of a market support and intervention center, and its enforcement.

Proposed Program Enhancement

Upon scrutiny of the research data, one notable finding was the problem on marketing of product outputs. It was found out in the study that beneficiaries were not fully satisfied with this aspect of the program needed enhancement. Thus, this proposed program enhancement .

Indicator/ Program Component	Program Enhancement/ Strategy	Time Frame	Responsible Person/ Agency	Resources Needed	Funding Source	Expected Outcome	Means of Verification	Remarks
Marketing of Output	1. Update Project Status of existing Livelihood Beneficiaries	Jan. 2018	City Agriculture Office, Mayor's Office	Beneficiaries Profile Gas for Monitoring	City Agriculture Mayor's Office	Updated Beneficiary Profile	Collated Portfolio	Basis for short time Intervention
	2. Creation of Committee on Market Support Services for Livelihood Projects	Feb. 2018	City Mayors Office, City Agriculture Sangguniang Panglunsod	Executive Order SP Resolution	Mayor's Office, SP	EO Order SP Res.	Signed SP and EO	Legal Basis for Intervention
	3. Lobby for the passage of City Ordinance on Market Support and Intervention Center	Feb. - May 2018	Sanguniang Panlungsod	Sponsoring Council	SP	Conducted Public Hearing	Signed Ordinance	Sustainable Basis for Market Intervention
	4. Enforcement of City Ordinance on market Support and Intervention	June 2018	Panabo City Agriculture Office Tourism office and City Economic and Enterprise Dev. Office	P 500,000 for Product Market needs P 500,000 for Mobility and communication expenses of the Center	AIP of LGU	Established Market Support and Intervention Center	Space and Structure Center	

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COLLEGE STUDENTS' SELECTED PROFILE VARIABLES AND THEIR MULTIPLE INTELLIGENCES

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ABSTRACT

This study determined the multiple intelligences of Second year students in Bachelor of Secondary Education at Ilocos Sur Polytechnic State College, Cervantes Campus. This is a descriptive-correlational study which aimed to determine: 1) profile of the respondents in terms of age, gender, parents' occupation: father, mother, parents' educational attainment: father, mother;2) multiple intelligences of Second year students in Bachelor of Secondary Education; 3)Significant relationship between the profile of the respondents and their multiple intelligences. Data were gathered using an adopted questionnaire from Dr. Terry Armstrong on Multiple Intelligences as the main instrument. Documentary analysis was used to supplement and countercheck responses of the students was also considered. The study revealed that most of the respondents belonged to age bracket of 18 years old. Most of them were females. Majority of their fathers' occupations were farmers and mothers' occupations were housekeepers. Their fathers' and mothers' educational attainments were high school graduates. The study further revealed that most of the dominant multiple intelligences of the Second year students are naturalists. However, the occupation of the mother is a factor in the musical abilities of the respondents. All the other profiles have no significant relationships which mean they are not contributory factors to the development of the respondents' multiple intelligences. The faculty members should be informed and oriented about the multiple intelligences of the BSED Second year students so they can adopt their teaching styles. College Instructors should employ strategies which can respond to the Multiple Intelligences of the learners.

Keywords: ***College Students, Selected Profile Variables, Multiple Intelligences***

INTRODUCTION

Teaching and learning strategies are partners to determine which correspondence is best for the attainment of efficient teaching and effective learning. The success in the teaching-learning process is partly the result of appropriate congruency in the multiple intelligences and teaching styles.

The teaching responsibilities of the faculty focus on their abilities to nurture meaningful self-growth among students through careful, well-organized instructional planning development and evaluation of learning. Hence, effective teaching is for the faculty to know the capabilities, abilities, strengths, and weaknesses of his students.

Teachers do not succeed in their teaching endeavor if they fail to identify and understand the way they teach and how their students learn. Students learn best if the activities are suited to their needs and intelligences. If these said needs and intelligences are known then teaching approaches, methodologies, strategies are altogether in place (Rundle and Dunn, 2001).

Salandanan (2009) stated that recognizing the students' innate talents and abilities, a teacher should plan lessons that will include activities that will suit their common sensitive reactions. Sternberg (1986) further stated that any theory of intelligence must be able to do three things such as relate intelligence to an individual's internal world and explain what happens when a person thinks intelligently; accept the relation between the external world and that person's intelligence; and explain how intelligence functions in the "real world"; and relate intelligence to the individual's experiences.

Howard Gardner (1991) as cited by Salandanan (2009) that every learner possesses nine intelligences as against the traditional concept of a single general intelligence. While everyone has all these intelligences, two or three may be exhibited full, with the rest surfing occasionally to form part of the learning experience. the nine intelligences are: verbal-linguistic, logical-mathematical, spatial, bodily-kinaesthetic , musical , interpersonal, intrapersonal, naturalistic and, spiritual/ existentialist. None of them act independent of the others.

Through the years that the researcher has been an Instructor in Professional Education Courses, she observed that most of the students have varied intelligences. With this, to have an effective teaching it is imperative on the part of an Instructor to possess a repertoire of teaching, strategies and techniques to reach a full range of students with varied learning styles and multiple intelligences. It is along this context that the research study "Multiple Intelligences of Second Year Bachelor in Secondary Education Students is conceived in ISPSC, Cervantes Campus.

The said study seeks to assess the level of the Multiple Intelligences of BSED students that will help the faculty understand their students' behavior which serves as a basis in formulating a framework guide for students, activities.

Research Objectives:

The study sought to determine the Multiple Intelligences of Second Year students in ISPSC, Cervantes Campus, Academic Year: 2016 -2017. Specifically, it sought to determine:

1. Profile of the students in terms of:
    1.1. age;
    1.2. gender;
    1.3. Parents' occupation of parents; and
    1.4. Parents' educational attainment.

2. Multiple Intelligences of Second Year students in Bachelor of Secondary Education; and
3. if a significant relationship exists between the profile of the respondents and their Multiple Intelligences.

METHODOLOGY

The descriptive-correlation method of research was used in the study, with the questionnaire checklist adopted from Dr. Terry Armstrong on Multiple Intelligence as the main instrument. Documentary analysis and informal interviews were also conducted to supplement and validate responses of the students to the questionnaires.

Total enumeration of the Second Year Students in the Bachelor of Secondary Education of ISPSC, Cervantes Campus was considered. There were twenty eight of them were involved in the study.

The frequency and percentage were used to determine the profile of the respondents. The weighted mean was used to determine the Multiple Intelligences of the respondents. To determine further the Multiple Intelligences of the respondents, scores per intelligence were added. The highest scores were used to determine the top dominant Multiple Intelligence of the students.

The scale of interpretation was used in the study to determine the strongest intelligence of the respondents.

Point Value	**Descriptive Equivalent**
5	Statement describes you exactly
4	Statement describes you pretty well
3	Statement describes you somewhat
2	Statement describes you very little
1	Statement does not describe you at all

Correlation through SPSS was used to determine the significant relationship of the profile of the respondents and their strongest Multiple Intelligences.

RESULTS AND DISCUSSIONS

Profile of Respondents
Age

Table 1 shows that 85.71% or 24 of the respondents belonged to age 18, 7.14% or 2 of the respondents belonged to age 19 and 7.14% or 2 belonged to age 20.

Age	Frequency	Percentage
18	24	85.71
19	2	7.14
20	2	7.14
TOTAL	28	100.00

This indicates that most of the respondents are eighteen years old. They entered First Year College when they were seventeen years old. Further, the finding implies that the College students wanted to finish their courses for four years a way of improving their lives. **Gender**

Table 2 reflects that out of 28 respondents 20 or 71.48% were females and 8 or 28.57% were males.

Sex	Frequency	Percentage
Male	8	28.57
Female	20	71.48
TOTAL	28	100.00

The findings imply that majority of the respondents were females. In an interview with some of these female students, they said that they want to finish their studies because they want to have a degree, find a job later and be empowered. One female respondent said: "*I want to have a degree that is why I am pursuing my college course. I want to work as a teacher someday*. "Further, the findings indicate that there are more females than males who were enrolled in the Second year BSED program. This finding also implies that the females have more desire, patience and determination in going to school.

Vacarro and Lovell (2010) conducted a study that more women are going to school that they were investing in themselves for personal growth and fulfilment of dreams to be someone better and stronger.

Parents 'Occupation

Table 3 displays the parents' occupation.

Parents' Occupation (Father)	Frequency	Percentage	Parents' Occupation (Mother)	Frequency	Percentage
farmer	21	75	housekeeper	24	85.71
driver	3	10.71	farm worker	2	7.14
laborer	2	7.14	dressmaker	1	3.57
tailor	1	3.57	vendor	1	3.57
carpenter	1	3.57			
TOTAL	28	100.00	TOTAL	28	100.00

As shown, 21 or 75% among the respondents' father were farmers while 3 or 10.71% were drivers, 2 or 7.14% were laborers, 1 or 3.57% was a tailor, and 1 or 3.57 was a carpenter. The findings imply that in the Municipality of Cervantes most of the fathers are farmers. The place is well known of producing vegetables, fruits, and even dairy products. This is due to the topography of the municipality consisting of vast terrains and mountain ranges and small valleys and plateaus.

The table further indicates that 24 or 85.71% of the respondents' mothers were housekeepers, followed by the farm workers with 2 or 7.14%. Next was the dressmaker with 1 or 3.57% and vendor having I or 3.57 % respectively.

Results of the interview done with the respondents are: "My mother is the typical mother who stays at home and rears her children while our father is busy in the farm, she does the household chores and takes care of my siblings."

The findings imply that majority of the mothers of respondents were housekeepers. This indicates that their mothers stay at home, do household chores, and take good care of their children while their husbands go to work.

Parent's Educational Attainment

Going into details, Table 4 reveals the educational attainment of the respondents' parents.

Parents' Educational Attainment	Frequency (Father)	Percentage	Frequency (Mother)	Percentage
Elementary Graduate	9	32.14	3	10.71
High School Undergraduate	3	10.71	2	7.41
High School Graduate	13	46.43	20	71.43
College Undergraduate	2	7.14	2	7.14
College Graduate	1	3.57	1	3.57
TOTAL	28	100.00	28	100.00

The table reveals that 13 or 46.43% of the fathers were high school graduates, 9 or 32.14% were elementary graduates, 3 or 10.71% were high school undergraduates 2 or 7.14% were college undergraduates and 1 or 3.57% College graduate.

Along mother's educational attainment, 20 or 71.43% were high school graduates, 3 or 10.71% were elementary graduates, 2 or 7.14% high school undergraduate, 2 or 7.14% College undergraduates and 1 or 3.57& College graduate.

This finding is supported by an interview with another respondent who said: "My mother finished high school. Because funds were lacking then, she was not able to go to college. However, despite this, she is very supportive of my schooling."

Most of the parents of the respondents finished high school. Further analysis shows that every parent is literate as they all attended formal schooling.

Table 5 Multiple Intelligences of the Students

No. of Respondent	Identified Highest Level Mean Value	Dominant Multiple Intelligence
1	4.30	Naturalist
2	4.00	Logical-Mathematical
3	4.12	Logical-Mathematical
4	4.70	Existentialist/ Spiritual
5	3.71	Naturalist
6	4.20	Naturalist
7	4.12	Naturalist
8	4.28	Existentialist
9	4.30	Logical-Mathematical
10	4.20	Logical-Mathematical
11	4.50	Naturalist
12	4.20	Verbal-Linguistic
13	4.28	Naturalist
14	4.43	Naturalist
15	4.03	Naturalist
16	4.00	Verbal-Linguistic
17	4.01	Naturalist
18	4.14	Naturalist
19	4.30	Logical-Mathematical
20	4.30	Interpersonal
21	4.71	Logical-Mathematical
22	4.43	Logical-Mathematical
23	4.70	Musical
24	4.01	Naturalist
25	4.80	Interpersonal
26	4.20	Naturalist
27	4.00	Musical
28	4.50	Logical-Mathematical

Table 6. Summary of the Multiple Intelligences of Students

Multiple Intelligence	F	%
Naturalist	12	42.86
Logical-Mathematical	8	28.57
Existentialist/ Spiritual	2	7.14
Verbal-Linguistic	2	7.14
Musical	2	7.14
Interpersonal	2	7.14
TOTAL	28	100.00

The result shows that there are 12 or 42.86 percent of students whose dominant multiple intelligences is Naturalist, obtained mean values of 4.38, 3.71, 4.20, 4.12, 4.50, 4.28, 4.43, 4.03, 4.01, 4.01, 4.14, and 4.0; These are the Second year students specializing Technology and Livelihood Education in the BSED Program who are nature lovers. Further, analysis during the informal interview of these students that they have their own pets at home, and most of all they have their vegetable and flower gardens to finance their schooling. This is supported by the statement of one of the respondents: "At home I have a pet dog. I love to take care of him and I play with him during my leisure." Another said: "I love gardening. I plant a lot of flowering plants at home. It makes me happy to see them bear flowers."

Eight or 28.57 percent of students whose dominant multiple intelligence is Logical- Mathematical obtained mean values of 4.0, 4.12, 4.30, 4.20, 4.3, 4.71, 4.43 and 4.5; As per documentary analysis, these are the students who specialize in Mathematics in the Second year BSED program. According to them, they like to answer number puzzles during their leisure time. Likewise, during the informal interview, their inclinations in working with numbers are further developed due to their experiences in selling vegetables, fruits, root crops, and fresh flowers in the market or in other places. This is supported by this statement from one student who said: "I like numbers. Since then, I have always excelled in my Mathematics classes. Besides, I have a direct experience with dealing with numbers because my parents are vegetable and fruit vendors. During my free time and during Saturdays and Sundays, I accompany them and help them manage our business."

Two or 7.14 percent of students whose dominant multiple intelligence is Verbal- Linguistic obtained mean values of 4.2, and 4.00; As per observation these are the enthusiastic students who use to join activities/contests in Essay Writing, Declamation Radio Broadcasting, and Extemporaneous Speech and Beauty and Brain. During the interview, these students during their childhood days were nurtured as wide readers and listeners in Kankanaey, Ilocano, Filipino, and English Stories by their old folks. One student said: "I like to read books and other reading materials. I do this during my leisure time." Furthermore, according to them when they were still kids starting to talk, the English language was being used by their parents and relatives. Another student said: "English is a language we often use at home.

Our parents taught us English because they said it will be very important in school and when we will have a job. "Then it continued/ progressed when these students worked in a call center and Chinese Instructional specialist/ Chinese tutor. One student said: "I worked as a call center agent to support my studies and to help my parents. There, I was able to hone my skill in using the English language."

Two or 7.14 percent of students whose dominant intelligence is Existentialist/Spiritual obtained mean values of4.7, and 4.28. Documentarily, these students were nurtured with God fearing families. As per observation these students are silence and behave well in their classes; they attend their religious services regularly. During the informal interview, they said: "I love doing apostolic services. Since I was in the intermediate grades, I have been serving the church as an altar server, reader of the Bible readings and the like." They are satisfied if ever they have apostolic services every Sunday afternoon and if ever they miss these services their lives are incomplete within that week.

Two or 7.14 percent of students whose dominant multiple is Interpersonal obtained mean values 4.3 and 4.8. These students as per observation they are friendly, enthusiastic, honest and very cooperative in any work endeavour in the campus. Further, analysis these are among the students' leaders and peacemakers in the campus. During the interview, these are the most popular students in their own community as well as in the campus. They could easily adjust themselves to different types of people. A student said: "I like to be a leader. I have always been one since my high school days."

Two or 7.14 percent of students whose dominant multiple intelligence is Musical obtained mean value of 4.7 and 4.00. As per observation these students are Music ally talented as revealed as their dominant multiple intelligence.

During the interview, it was found that these students have nice voices; they use to join singing contests in school, barrio and town fiestas during their younger days and still continue today if ever they have their chances to join. Above all, they are members of the Church choir. Another student said: "I remember those times when I joined singing contests not only in school but also in our own community and in other barangays. In most of these contests, I won so; I was motivated to join such singing contests."

The findings show that learners are gifted with intelligences. They are born with and develop their own capabilities and talents. Moreover, students can learn, they process and absorb new information differently. It is therefore the responsibility of the Instructor to provide flexibility in a classroom adapted to differences in intelligences as well as learning styles of the students.

Dulinayan (2007) claimed that each person is unique, can learn and has been an individual intelligence and learning style. This intelligence and learning style should be acknowledge and respected since intelligence and learning style are functions of heredity and experience, including strengths and limitations and they are developed individually over each person's life span. Learners are empowered by knowledge of their own and others' learning styles.

Teaching individuals through their multiple intelligence, improve their achievements toward learning. Salandanan (2009) further stated as a teaching strategy, the Multiple Intelligences theory bears important implications in planning activities.

Table 7. gives an account on the Summary of the relationship between the profile of the respondents and their Multiple Intelligences.

Profile	Verbal-Linguistic	Logical-Mathematical	Musical	Spatial	Bodily-Kinaesthetic	Interpersonal	Intrapersonal	Naturalist	Existentialist/ Spiritual
a .Age	.265	.203	.188	.114	.149	.172	.257	.314	.051
b. Gender	.115	.146	.347	.347	.324	.223	.193	.072	.011
c. Occupation of Parents									
Father	.209	.082	.186	.026	.002	.066	.308	.374	.156
Mother	.265	.363	.462	.370	.306	.235	.529	.194	.334
d. Educational Attainment of Parents									
Father	.258	.559	.158	.278	.231	.340	.325	.188	.279
Mother	.116	.577	.135	.182	.235	.227	.172	.067	.044

Legend: Correlation is significant @.05 level (2 tailed) NS=Not Significant S=Significant

The relationship between the profile of respondents and their multiple intelligences is revealed on the table.The profile variables include age, gender, and occupation of parents: father and mother', educational attainment of parents: father and mother. The occupation of the mother is a factor in the Musical abilities of the respondents. This is proven with the probability value of.462 which is higher than .05 level of significance. This finding simply means that the said profile variable is an influence to their multiple intelligences.

All the other profiles have no significant relationships which mean they are not contributory factors to the development of their Multiple Intelligences. Such multiple intelligences may be acquired, developed and strengthened through experiences and effect of environmental conditions.

Prieto (2006) claimed that the interaction between learner differences and curricular and also environmental conditions is another key factor affecting the Multiple intelligences of the learners.

However, Vega (2007) further claimed that through learning and social acculturation, the learners have acquired their own preferences for how they like to learn and the pace at which they learn.

Faculty members have to redirect their efforts to focus on teaching students how and when to employ different learning skills. This type of teaching surely cater the different multiple intelligences and learning styles of the students.

Moreover, Ornstein (2000) stated that a framework guide for student's activities should provide the teacher with content and activities for integrating skills into the subject. Teachers do make a difference in student activity and achievement

CONCLUSIONS

The conclusions of the study are as follows:

1. Most of the respondents are eighteen years old and dominated by females. The respondents' fathers were mostly farmers while the mothers were mostly housekeepers. Moreover, the parents mostly were high school graduates.

2. The most dominant multiple intelligences of the Second Year Students in the Bachelor of Secondary Education is Naturalist.

3. The profile of the respondents were generally not significantly related to their multiple intelligences, except for the mother's occupation being related to musical intelligence.

RECOMMENDATIONS

The following are recommended:

1. Instructors should be informed relative to the multiple intelligences of the students so they can be in a position to adopt teaching styles that can address the students' multiple intelligences.

2. For students who are strong in naturalistic intelligence, relating to nature, organizing and finding patterns are the best pathways to help them learn. Field trips would be ideal, but anything that allows them to get some fresh air and interact with plants and animals will help.

3. Programs or activities specifying contents and activities integrating skills into the courses/ subjects for students so as to identify fully their multiple intelligences may be adopted by the Instructors in Mathematics connecting all concepts to nature-example relate mathematical progressions to how plants grow, relate sets to Venn diagrams to types of flowers and how they share certain characteristics; Point out mathematical influences in nature-example the various geometries in natural formations. Further, Instructors may relate everything the students learn to nature.

4. A similar of further study may be conducted using different variables in the study with the different respondents and locale.

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HEALTH-SEEKING BEHAVIOR OF THE FAMILIES UNDER PANTAWID PAMILYANG PILIPINO PROGRAM (4Ps) IN SAN JOSE, OCCIDENTAL MINDORO

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ABSTRACT

The study was conducted to assess the health-seeking behavior of the families under Pantawid Pamilyang Pilipino Program (4Ps) in San Jose, Occidental Mindoro utilizing a cross-sectional research design. face-to-face interviews were conducted between May and June 2017 using structured questionnaire and were participated by a household head covered by the Conditional Cash Transfer (CCT) Program dubbed as Pantawid Pamilyang Pilipino Program (4P's) through quota sampling.The findings revealed that respondents were mostly middle-aged, female, had formal education up to high school and are earning 4,000 pesos and above monthly. They have a large proportion of family size resulting to high dependence rate. Moreover, health-seeking behavior of families under 4Ps is considered "neutral" and does not correlate with age, educational attainment, number of households, number of years in the program, length of enrollment in Philhealth, and Philhealth coverage per family.

Keywords: ***Health-seeking behavior, Pantawid Pamilyang Pilipino Program, conditional cash transfer, concept of health, human resources for health, health services, medicine and prescription***

INTRODUCTION

Poor health remains a leading problem among the country's population below the poverty line. The leading causes of morbidity and mortality such as all forms of tuberculosis, pneumonia, diarrhea, or even non-communicable diseases like hypertension and heart disease are prevalent in urban and sub-urban poor communities. According to the 2017 first quarter statistics, 51% (estimated 11.4 million) of the Filipinos belong to the poor population (SWS, 2017). The poorest of the poor are the indigenous peoples, small-scale farmers who cultivate land received through agrarian reform, landless workers, fishers, and people in upland areas. Aside from living condition, constraints in health care delivery system and substandard health services and facilities contribute to poor health among the poor. Similarly highly cost hospitalization, medical consultation and medication gives hesitation to the poor families to seek health services since majority of the population relies only on the out-of-the-pocket health-financing scheme. In addition, lack of knowledge on health promotion and disease prevention and ill-advised practices would contribute to worsen their health status (Razavi et al, 2009).

The health-seeking behavior of a community determines how health services are used and in turn the health outcomes of the population.

The utilization of health services would also depend on educational levels, economic factors, cultural beliefs and practices. Moreover, it also includes environmental conditions, socio-demographic factors, knowledge about the facilities, gender issues, health policy and the health care system itself (Musoke, Boynton, Butler, & Musoke, 2014). Despite the availability of services the poor, being financially constrained, normally have limited choice and often use public services many of which are offered free of charge. Certainly, there is a significant difference in access to various health care providers between the rich and poor (Thuan, Lofgren, Lindholm, & Chuc, 2008). Moreover, the lack of public facilities in some communities, which are predominantly used by the poor, is likely to affect the health seeking practices of the population (Islam, Montgomery, & Taneja, 2006). This problem of inequity in health facility distribution affects the health seeking practices of several communities hence hindering health services utilization.

In 2007, the Philippines implemented a conditional cash transfer program for the poorest Filipino households. The Pantawid Pamilyang Pilipino Program or 4Ps, which also serves as the country's version of conditional cash transfer program, is the central program of the many poverty alleviation tactics applied. Other current poverty reduction programs include the subsidized health insurance coverage, supplemental feeding program, the food for work program, rice subsidy program, the Self-Employment Assistance-Kaunlaran (SEA-K) and the Kapit-Bisig Laban sa Kahirapan – Comprehensive Integrated Delivery of Social Service (KALAHI-CIDSS) (Geron, Chua, & Songco, 2011). The Pantantawid Pamilyang Pilipino Program fosters "co-responsibility" between the government and families, by requiring families to assume responsibility for health and the appropriate use of cash grants. The conditions set by the program are only limited to the prenatal and postnatal care for pregnant women, childbirth with the assistance health professionals, mandatory attendance in Family Development Sessions (FDS), regular check-ups and vaccines for children below 5 years old, semi-annual deworming for children between 6 and 14 years old, schooling of all children below 18 years of age and at least 85% school attendance (DSWD, 2009), which are very limited and only a small part of the health system. The conditions imposed by the conditional cash transfer grants provide an incentive for the poor to use available health services, strengthening the link between health service providers and poor households. This study created a clearer view on the health seeking behavior of the 4P's families. In addition, this study discussed perception and attitudes toward health care.

STATEMENT OF OBJECTIVES

The study aims to assess the health-seeking behavior of the families under Pantawid Pamilyang Pilipino Program (4Ps) in San Jose, Occidental Mindoro.

Specifically the study aims to:

1. Describe the profile of the respondents under 4Ps in terms of:

a) age,
b) sex,
c) educational attainment,
d) monthly income,
e) number of households,
f) number of years in the program,
g) length of enrollment in Philhealth (in years),
h) Philhealth coverage per family,

2. Assess the health-seeking behavior of the families under 4Ps in terms of:

a) concept of health,
b) human resources for health,
c) use of health services in the community, and
d) medicine and prescription.

3. Determine the correlation between respondent's profile and their health-seeking behavior.

METHODOLOGY

This study utilized a cross-sectional design and was conducted in Barangays Labangan, Caminawit and Pagasa in San Jose, Occidental Mindoro. Data were collected through face-to-face interviews conducted between May and June 2017 using structured questionnaire.

Prior to selection of the urban poor communities, the research facilitators conducted social investigation. The research team looked into social, economic and political situations of the communities. There is a conduct of courtesy calls on the formal and informal leaders, introduced themselves and the project they planned to conduct in their respective communities, and solicited the latter's approval and assistance.

Quota sample of 110 household heads per barangay served as the respondents of the study.

They were members of the family covered by the Conditional Cash Transfer (CCT) Program dubbed as Pantawid Pamilyang Pilipino Program (4P's) in Barangay Labangan, Pagasa and Caminawit. These barangays comprise the large portion of grantees of 4Ps and considered as urban barangays of San Jose, Occidental Mindoro. The household heads selected to participate in the study were gathered during their regular family development sessions (FDS). FDS is identified to be one of the conditionalities of the Pantawid Pamilyang Pilipino Program (4Ps) that aims to develop new skills among beneficiaries and for them to possess knowledge on parental roles and responsibilities on issues such as health, nutrition, education, protection and psychological needs of their children.

Table 1 below summarizes the proportion of respondents from each barangay included in the study.

Table 1. Number of respondents included in the study per barangay (n = 278)

Barangay	Frequency	Percentage (%)
Caminawit	99	35.60
Labangan	70	25.20
Pagasa	109	39.20

A modified questionnaire adopted from Malanyaon & Concepcion (1995) was used in determining the health-seeking behavior in poor communities. The questionnaire was translated in Tagalog. The questionnaire contains the following parts:

1. Profile of the 4Ps families which includes the sex, age, educational attainment, number of household and number of years in the program.
2. Health attitudes and health seeking behavior which includes concept of health, human resources for health, use of health services and medicine and prescription.

The questionnaires were enclosed with a letter that provides information on the research objectives as well as the significance and importance of the study. Participation in the study was voluntary and participants were explained that they have the option not to answer the questionnaire. Household heads who agreed to participate in the study signed a written consent form. Respondents were not compensated for their participation. Complete anonymity of the research participants was observed as they were asked not to write their names or any identifying marks on the questionnaires. Data collection was facilitated through face-to-face interviews that took an average of one and a half hour. The research facilitator read the survey questions and assisted the respondent in answering them. In the administration of the survey questionnaires, inconsistent data responses were trimmed and excluded from the analysis.

Data was entered into a software package (SPSS:Trial Version) and statistical analysis. For the quantitative data, descriptive statistics such as frequency distribution and percentage; and mean and standard deviation for the central tendency indices were used. To correlate the respondent's profile and their health-seeking behavior, Pearson r correlation for continuous data and Spearman rho product correlation for ordinal data was used.

FINDINGS

A. Profile of the families under 4Ps

Table 2 shows the profile of the 278 respondents in three barangays of San Jose, Occidental Mindoro.

The results also shows that most of the respondents were middle-aged (mean = 42.14 ± 8.98 years) and females (94.2%) comprised majority of them. Furthermore, 50% had formal education up to high school and most are earning 4,000 PhP above (45.70%). The Table 2 also shows the average size of the household (mean=6.81 ± 2.35) in the 3 barangay under study ranging from 2 – 19 household members. The average length of enrollment in the program is 4.91 years (SD=1.06) with the average length of enrollment in financial risk protection scheme (Philhealth) is 4.95 years (SD=1.13) with Philhealth coverage of 5 members per household.

In the study, there are more female respondents compared to male. Since the attendees of the FDS were the household heads, 4P's has a high number of women-headed households. In many cases, women are often designated as recipients of the cash transfers which are the primary respondents of this study, because of the assumption that women are more inclined to invest in the human development of their families, especially their children.

In terms of education, the result of the study confirms with Reyes et al (2013) that there are relatively more members in 4Ps families who have lower educational attainment than in non-4Ps families. The difference is more evident among those who attained elementary level. It is important that programs such as the 4Ps be implemented to help them reach higher education or finish at least high school. Interestingly, this is the reason why the 4Ps program designs its objective – that is, increasing access to basic education.

Table 2. Profile of the Selected Pantawid Pamilyang Pililipino Grantees in San Jose, Occidental Mindoro

Characteristics	Frequency (n=278)	Percentage (%)
Age (years)	Mean = 42.14 ± 8.98	
Sex of the household head		
Male	16	5.80
Female	262	94.20
Educational attainment		
Never been to school	16	5.80
Elementary level	81	29.10
High school level	139	50.00
Attended vocational course	16	5.80
College level	26	9.40
Monthly income		
Less than 1,000	16	5.80
1,000 – 1,999	16	5.80
2,000 – 2,999	46	16.50
3,000 – 3,999	73	26.30
4,000 above	127	45.70
Number of households	Mean = 6.81 ± 2.35	
Number of years in the program	Mean = 4.91 ± 1.06	
Length of enrollment in Philhealth (years)	Mean = 4.95 ± 1.13	
Philhealth coverage per family	Mean = 5.22 ± 2.11	

Poverty conditions are usually described using household data on a monetary welfare indicator based on either income or expenditure collected from sample surveys, together with a minimum level of the welfare indicator. The Philippine Statistical Authority estimates poor Filipino households if their per capita income falls below the official poverty threshold. It is considered that all members of the family are poor if their household is also poor. Furthermore, poverty rates can be based on the proportion of Filipinos with incomes less than food poverty thresholds, which may be thought of as the proportion in extreme poverty. World Bank's estimates of poverty based on consumption that involve an international poverty line of 1.9 dollars per person per day in 2011 purchasing power parity (PPP) prices was used in the enrollment in the program (Albert et al, 2017). In the study of Reyes et al (2013), 4Ps beneficiaries have an average per capita income of PhP8, 522. The poorest 10 percent of 4Ps recipients have a per capita income of PhP4, 788 while the richest ones have PhP75, 89. Without the cash grant, each person from 4Ps families had about PhP7, 740 to cover his or her expenses for the entire six months.

In the study of Reyes et al (2013) revealed a significant proportion of the program recipients have large family size with at least 8 members. It mirrored a higher dependency ratio.

B. Health-Seeking behavior of the Pantawid Pamilyang Pilipino Program families

Table 3 shows the health-seeking behavior of the 4Ps families in terms of their concept of health (mean=3.01), human resource for health (mean= 2.83), health services in the community (mean=2.89), medicine and prescription (mean=2.92) which are interpreted as neutral. Moreover, the overall health seeking behavior of the respondents is also interpreted as neutral (mean=2.86).

When an individual makes a decision in relation to their health, they weigh up the potential risks or benefits of a particular behaviour. But they do so in a way that is mediated by their immediate practical environment, their social rootedness and their whole outlook on life more generally (MacKian, 2003). Moreover, Lash (2002) stated that the particular ways of behaving, thinking and reaching decisions of individuals or groups, that in turn reflect the social construction of their position in wider society at a particular place and time.

Table 3. Health-seeking behavior of families under 4Ps

Health Seeking Behavior	Mean
Concept of health	
Being healthy is the ability individual to function to one's maximum potential.	2.82
Consulting doctors even you are feeling healthy.	3.31
The poor and rich have the same health problems.	2.79
Health is the ability to function optimally without becoming a burden to others.	3.26
Health is a state or a standard of bodily existence or fitness and therefore an obligation of every individual.	2.88
Sub mean	**3.01**
Human resource for health	
Discrediting treatment from "herbolaryos".	2.91
Doctors' clinical judgment can be trusted.	2.83
Discussing health condition and other possible course of treatment with the physician.	2.80
Consulting other health workers in the community e.g. nurse/midwife.	2.78
Trusting physicians health advise.	2.84
Sub mean	**2.83**
Use of health services in the community	
Health services in the community are sufficient.	2.80
Government health providers are the same quality with the private.	2.92
Health system in the country has the chance to improve.	2.71
Modern medicine is more effective with the traditional and folk medicine.	3.13
Doctors treat the rich and poor equally.	2.90
Sub mean	**2.89**
Medicine and prescription	
A good doctor should prescribe medicine to sick patients.	3.21
Continuing prescribed regimen even the patient already feels better.	2.93
Discouraged use of medicine from a person with similar symptoms.	2.88
Limiting use of over-the-counter drugs	2.83
Controlling use of non-prescription antibiotic.	2.75
Sub mean	**2.92**
Overall mean	**2.86**

Legend: *Very Negative - 1.00-1.79, Negative - 1.80-2.59, Neutral - 2.60-3.39, Positive 3.40-4.19, Very Positive – 4.2-5.00*

In terms of seeking human resource for health, increase in price for private doctors and government hospitals are likely to lead to a greater than proportionate reduction in demand. For public clinics, price changes are likely to cause the middle income group to reduce demand. The study of Auer et al (2000) revealed that about two-thirds of patients had been told by someone to have a medical check-up for their symptoms. Furthermore, many cases approached private doctor as the first health care provider for treatment. A little percentage approached a health centre and traditional healer (albularyo), although some seek a traditional healer at a later point. The poor are more price sensitive than the rich. It agreed with the study of Kim et al (2014) which states that Filipino sought healthcare at a government health center because it was affordable and easily accessible. This could define barriers to healthcare facility access.

Other reasons for failure to seek healthcare include failure to recognize the severity of the condition, distance to the health care facility, accessibility to transportation, lost work and rural location of home (Gombojav et al, 2009).

Self-medication with antibiotics can lead to increasing resistance to antibiotics and may also lead to improper use or over-dosage of medicines (Kim et al, 2014). Not all of the consumers are aware about the safety and efficacy of the OTC medicine use. This is also parallel with a study conducted by Younes et al (2011) wherein most of the parents declared that over-the-counter medicines are safe regardless of how frequently they are used and were not aware that over-the-counter medicines can possibly cause serious interactions. Thus, there is a need to raise awareness among consumers on OTC medicine use.

C. Correlation of profile of families under 4Ps with their health-seeking behavior

Table 4 revealed that only sex (r=-0.146, p value 0.600) and monthly income (-0.148, p value 0.014) correlates with the health-seeking behavior. However, the result could be inconsistent with sex because the there is a big difference with the sex ratio. Also, it only revealed a weak negative monotonic correlation between participants' monthly income and their health-seeking behavior.

According to Jacob et al (2014), low-income population may spend time focused on the hassle of finding basic necessities such as food, clothing and shelter. If they have employment, paid time off for procedures or medical visits may not be available. Consequently, these populations may have daily stressors, hassles, or competing priorities that affect not only their ability to engage in health promotion behaviors but also their willingness to do so.

Table 3. Correlation of profile and health-seeking behavior.

Characteristics	Correlation Coefficient	p-value
Age (years)*	-0.032	0.600
Sex**	-0.146	0.015
Education**	0.016	0.788
Monthly Income**	-0.148	0.014
Number of households*	-0.093	0.122
Number of years in the program*	-0.040	0.503
Length of enrollment in Philhealth (years)*	-0.055	0.364
Number of Philhealth beneficiaries per family*	-0.012	0.843

** computed using Pearson Product Correlation*
*** computed using Spearman rho Rank Order Correlation*

The result of the study contradicts to the study of Ahmed et al (2005) stating socioeconomic indicators were the single most pervasive determinants of health seeking behavior. It is also discordant with the findings of Wong and Toh (2009) stating that gender, age, income, educational levels are some of predictive factors.

Furthermore, a study of Li and Feng (2017) stated that the current reform and the huge government investment have not resulted in access and utilization of affordable quality care.

CONCLUSION

The following are the conclusions based on the findings of the study:

1. The respondents were middle-aged, female, had formal education up to high school and most are earning 4,000 and above. There is a large proportion of family size resulting to high dependence rate. The families are enrolled in the program for five years.
2. Their health-seeking behavior is considered neutral as decision in relation to their health, as they weigh up the potential risks or benefits of a particular behavior.
3. Income has weak monotonic negative correlation with health-seeking behavior. Age, education, number of households, number of years in the program, and length of enrollment in Philhealth are not correlated.

RECOMMENDATION

The study recommends the following:
1. Perceived quality of health care services also play vital role in health seeking behavior and selection of health care provider. It should be stressed out that the health service provider must be accessible at all time.
2. Informed clients IEC activities should be organized at community level with information on health services and their rights. It will increase the prevalence of utilization of services. It is vital that primarily the perceptions, attitudes and expectations of the community, who is the actual consumer, are outlined before activities are planned and implemented.
3. The downside of the supply side of the health services like health packages, essential medicines, standard equipment, and efficient human health resources must be sought, as it would also affect the health seeking of the consumers.

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MAKING CONNECTIONS : PERCEIVED VALUES OF REFLECTIVE JOURNAL WRITING AND THE STUDENTS' WRITING SKILL

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ABSTRACT

This descriptive study was undertaken to find out the perceived values of reflective writing in relation to the students' writing skill and to determine whether there is significant difference in their writing skills when grouped according to gender and college. A total of 150 randomly selected fourth year college students from Occidental Mindoro State College (OMSC) Main, Labangan and Murtha campuses were the respondents of the study. Data were gathered using survey questionnaire and were also obtained from the respondents' essay . Descriptive Statistics such as weighted mean , Pearson r moment correlation , t-test and analysis of variance (ANOVA) were used in analyzing the gathered data. It was found that the respondents valued reflective journal writing in terms of motivation, improving learning, and convenience; they were not skilled in writing specifically in terms of content, organization, language use, vocabulary and mechanics; their perceived values regarding reflective journal writing do not affect their writing skills; and female respondents have better writing skills than male as well as the respondents from the College of Teacher Education have the best writing skills among the students from the six colleges.

Keywords*: perceived values, writing skill, reflective journal writing, gender, college, connections*

INTRODUCTION

Society spends a lot of time communicating via the written word through e-mails, texts, and tweets because of professional and personal reasons, people spend more time in writing that requires them to be literate in school. on the ability and effort of the person, written exchanges can probably boost one`s career or hinder it (Balderama, 2009). Writing as defined by Bongat (2009) is the act of putting letters, symbols, numbers or words on paper or a computer screen. Writing is used to express and explain ideas. It is also an expression of language in the form of letters, symbols or words.

The school's curriculum shows that the major part of the students' performance comprises writing activities, from homeworks, synopses, business correspondence, essays, professional and personal reasons, people spend more time in writing that requires them to be liberate in school. Depending on the reports, term papers, quizzes to examinations. Written communication has been studied and taught to schools as a significant productive performance skill and macro skill of the English language (Bongat,2009) .

The aforementioned scenario implied that in school students spend most of their time writing yet they were not able to attain writing skill as reflected in the several written outputs submitted by the students. Writing as one of the basic skills of the English language is generally considered one of the most difficult that other skills for foreign language students (Javed., Juan, and Nazli , 2013) .

The above premised coincides with researcher's experience and observation that most of the students are not mindful and very careless in the application of basic rules in grammar, capitalization, spelling, punctuation marks, and indention. There are some who skip answering the essay questions in the test and cannot produce a well- written output.

They cannot write good vocabularies that are appropriate in the composition. Those who can write have difficulties on the content. The content is not that substantial and it lacks important details and has no direct emphasis about the subject while some students do not know how to organize their thoughts and ideas properly.

To address the aforementioned writing problems, schools tried a variety of intervention tactics when students struggle on academic concepts. Remediation is just one type of intervention. Effective remediation involves assessing the students' needs, providing intervention and evaluating student outcomes. In remediation, teachers correct a deficit rather than teach the students to cope with the deficit. The great role of the teachers for a student is to improve his / her skills through direct instruction. Any remediation strategy may include reteaching, using of alternative instructional strategies, task - analysis, further practice or even one -on- one tutoring (Seehorn, 2011).

Problems in writing were addressed in Occidental Mindoro State College through the implementation of journal writing which required students to write reflective journals. This intervention was done since several studies showed that reflective journal writing could help students attain writing proficiency. As stated by O'Connell and Dyment (2006) that journal is a tool to encourage students in the process of reflecting on their own learning and improving their own writing skills.

Reflective journal writing as defined by the Learning Center of the University of New South Wales (2008) as the response to experiences, opinions, events or new information ; the response to thoughts and feelings; a way of thinking to explore learning ; an opportunity to gain self-knowledge ; a way to achieve clarity and better understanding of what they are learning; a chance to develop and reinforce writing skills; and a way of making meaning out of what they study.

Reflective journal writing is an effective learning technique that enables students to learn while they are writing. Students can use journals for a number of purposes such as writing about interesting topics, expanding their imagination, and establishing connections between new information and the things they already know. Journal writing encourages students to keep an invaluable record for their thoughts, feelings, experiences, personal values and beliefs (Farrah, 2012). Furthermore, reflective journal writing offers students opportunities to communicate with their instructors with confidence and motivation as there is no anxiety related to assessment or grading (Park, 2003).

Professional Development for Academics Involved in Teaching (2006) enumerated additional values of reflective journal writing such as : (1) it provides an informal place where learners can write their own reactions to their experiences; (2) it can enhance the 'conversation with oneself'; (3) it can be a tool that helps learners make better sense of their experiences by summarizing them and actively trying to understand them; and (4) it enables learners to go back and 'see' their own thinking .

Inspite of the several benefits the reflective journal writing could offer and the concerted effort of the teachers and school officials to address the aforementioned students' writing problems , teachers are still noticing the same writing problems on the students reflective journals. Thus, the researcher was prompted to investigate on the perceived values of reflective journal and the students' writing skill.

OBJECTIVES

This paper aims to find out if there exist a relationship between the perceived values of reflective journal writing and the writing skills of the students. Specifically, it attempted to:

1. Identify the values of reflective journal writing as perceived by the respondents in terms of :

a. motivation
b. improving learning
c. convenience

2. Determine the writing skill of the students in terms of :

a. content
b. organization
c. vocabulary
d. language use
e. mechanics

3. Find out if there is a significant relationship between the perceived values of reflective journal writing and students' writing skill.

4. Find out if there exist a significant difference on the writing skills of the students when they are grouped according to gender and college.

METHODOLOGY

This study utilized the descriptive-correlational design in order to determine whether the perceived values of reflective writing have a significant relationship on the writing skill of the respondents and to determine the significant difference in their writing performance when they are grouped according to gender and college. Survey questionnaire was the main instrument used in gathering data for the study. To elicit responses for the first problem posted in the study, the instrument of Farrah (2012) about reflective journal writing was adopted. In determining the level of student's writing skill, they were instructed to write a 300 word essay about the implementation of free tuition fee in state universities and colleges. The participants of the study were the 150 randomly selected fourth year college students from the different colleges in OMSC Main, Labangan , and Murtha campuses since they have longer exposure to reflective journal writing. The data were analyzed using descriptive statistics such as weighted mean, Pearson r Moment Correlation, t-test and analysis of variance (ANOVA) .

FINDINGS

A. Perceived Values of Reflective Journal Writing

One of the benefits of reflective journal writing is that it enables students to write unconstrained on an interesting topic related to texts that they have covered in a certain course or any other personal experiences they have undergone (Farrah, 2012).

Table 1. Perceived Values of Reflective Journal Writing

Indicators	Mean	Interpretation
Motivation	4.22	Valued
Improving Learning	4.26	Valued
Convenience	3.54	Valued
Overall	**4.01**	**Valued**

Relative thereto, it can be gleaned in Table 1 that reflective journal writing is valued as shown in 4.01 over all mean in terms of motivation (4.22) , improving learning (4.26) , and convenience (3.54) . This implies that the respondents appreciates reflective journal writing since it helped them in expressing their ideas and opinions as well as in understanding what they have learned. Though reflective journal writing is not easy and requires considerable investment of time , they still want it to be continued since it was a worthwhile experienced.

B. Writing Skills of the Students

According to Javed, Juan, and Nazli (2013) to be proficient in writing, the students must gain mastery of the micro-skills in writing that will help them to have good command over writing that is free from mistakes and errors. In the process of micro-skills the writer needs to: (1.) use the script, spellings and punctuations correctly. (2.) apply the accurate words to state the right tense, case and gender. (3.) make use of major components such as subject, verb and object etc. appropriately which can convey the thought of writer clearly to the reader. (4.) make the text coherent to make the reader understand easily. (5.) place all parts of speech properly. (6.) apply the vocabulary and terminologies appropriately. (7.) use the style of writing suitably to the requirements of the audience. (8.) clarify the central ideas from the sustaining information. (9.) avoid from jargon, slang, taboos and keep in mind the standard of language according to the mental level of the reader. (10.) judge about the prior knowledge of the audience about the subject.

As shown in Table 2, it was quite alarming that the writing skills of the fourth year college students from the three campuses obtained an overall mean of 2.16 and interpreted as needs improvement . Content (2.14) , organization (2.18) , vocabulary (2.17), language use (2.18) and mechanics (2. 13) were also low or it needs improvement . Though the respondents are already in fourth year college and were expected to obtain high level of writing skill still they were not able to produce well written outputs. The findings of the study was supported with the explanation of Carneige Mellon University (2015) that since writing is a complex intellectual task involving many component skills, some of which students may lack completely, some of which they may have only partially mastered. These skills

skills involve, among other things: reading comprehension, analytical skills, writing skills, including: writing mechanics: grammar, sentence structure, spelling, etc., planning a writing strategy, communicating ideas clearly and concisely, constructing a reasoned, demonstrable argument, effectively marshaling evidence and using sources appropriately, and organizing ideas effectively . When students lack skills in these areas, their writing may be unsatisfactory in multiple ways – from poor grammar and syntax to unclear organization to weak reasoning and arguments. Complicating matters is the fact that many students' reading skills are also poor.

Table 2. Writing Skills of the Students

Indicators	Mean	Interpretation
Content	2.14	Needs Improvement
Organization	2.18	Needs Improvement
Vocabulary	2.17	Needs Improvement
Language use	2.18	Needs Improvement
Mechanics	2.13	Needs Improvement
Writing Skills	**2.16**	**Needs Improvement**

Further, the use of English in writing outputs entails many problems on the part of the students because it is not their native language. Errors in grammar are so common in many written outputs of the students and can cause miscommunication and comprehension problems (Albano, Go & Posecion , 2011). It is a difficult skill for both native and nonnative speakers in a similar way, because any writers should make a harmony among several issues such as content, organization, purpose, audience, vocabulary, punctuation, spelling, and mechanics (Gholaminejad, et al , 2013).

C. Relationship Between the Perceived Values of Reflective Journal Writing and Writing Skill

As shown in Table 3, there is no significant relationship between the perceived values of reflective journal and their writing skill since the p-value is greater than .05.

This also indicates that though they value reflective journal writing , it has no significant effect in improving their writing skill. The result of the study contradicted the statement of O'Connell and Dyment (2006) that journal is a tool to encourage students in the process of reflecting on their own learning and improving their own writing skills.

Table 3. Relationship between the Perceived Values of Reflective Journal Writing and Writing Skill

Values of Writing	Writing Skill	Correlation Coefficient	p-value	Interpretation
	Content	.090	.276	Not Significant
Motivation	Organization	-.039	.635	Not Significant
	Vocabulary	.019	.820	Not Significant
	Language Use	-.065	.427	Not Significant
	Mechanics	.003	.973	Not Significant
	Content	-.022	.786	Not Significant
	Organization	.626	.754	Not Significant
Improving Learning	Vocabulary	.071	.388	Not Significant
	Language Use	-.006	.940	Not Significant
	Mechanics	.062	.454	Not Significant
	Content	.025	.764	Not Significant
	Organization	.095	.248	Not Significant
Convenience	Vocabulary	.145	.076	Not Significant
	Language Use	.088	.282	Not Significant
	Mechanics	.131	.110	Not Significant
Overall	**Overall**	**.032**	**.701**	**Not Significant**

D. Difference on the Students' Writing Skills when Grouped According to Gender and College

All the members of a given community don't speak or write in the same way, but each member has his/her own dialectal, sociolectal features of speaking or different styles of writing. The differences among the men and women in using different language features can be revealed through writing skill (Soori & Zamani, 2011).

When grouped according to gender, it can be gleaned from the table that there is a significant difference on the students' writing skills as shown in 023 over all mean. Further, there is a significant difference on content (.020), vocabulary (.007), language use (.023), and mechanics (.015). According to Soori and Zamani (2012), When grouped according to gender, it can be gleaned from the table that there is a significant difference on the students' writing skills as shown in 023 over all mean. Further, there is a significant difference on content (.020), vocabulary (.007), language use (.023), and mechanics (.015). According to Soori and Zamani (2012), students (males and females) use language features (e.g. style of writing) differently. Due to the fact that men and women speak differently in using different language features, they can write differently as well.

Table 4. Difference on the Students' writing Skills when Grouped according to Sex.

Indicators	t-value	Significance	Interpretation
Organization	1.36	.173	Not Significant
Content	2.35	.020	Significant
Vocabulary	2.72	.007	Significant
Language use	2.30	.023	Significant
Mechanics	2.46	.015	Significant
Writing Skills	**2.30**	**.023**	**Significant**

College courses demand many different kinds of writing that employ a variety of strategies for different audiences. As shown in Table 5 there is a significant difference on the students' writing skills when grouped according to college as shown in the 9.189 f-value with .000 significance. This implies that respondents from the six colleges have different levels of writing skill.

Table 5. Difference on the Students' Writing Skills when Grouped according to College

Variable	F- value	Significance	Interpretation
Writing skill	9.189	.000	Significant

Table 6 shows the Post Hoc Test regarding the comparison of the writing skills of respondents from different colleges. It can be gleaned from the table that respondents from College of Teacher Education , College of Arts Sciences and Technology as well as College of Agriculture have higher level of writing skill as compared to respondents from College of Architecture, Engineering and Technology, College of Business Administration and Management , and College of Criminal Justice Education as shown in their respective mean difference.

Table 6. Comparison of the Writing Skills of Students from Different Colleges

1st Group	2nd Group	Mean Difference	Significance	Interpretation
CAET	CBAM	-.067	.791	Not Significant
	CAST	-.861	.001	Significant
	CTE	-1.336	.000	Significant
	CA	-.738	.003	Significant
	CCJE	-.335	.174	Not Significant
CBAM	CAST	-.794	.001	Significant
	CTE	-1.269	.000	Significant
	CA	-.670	.003	Significant
	CCJE	-.268	.232	Not Significant
CAST	CTE	-.475	.046	Significant
	CA	.123	.583	Not Significant
	CCJE	.526	.021	Significant
CTE	CA	.598	.008	Significant
	CCJE	1.001	.000	Significant
CA	CCJE	.403	.061	Not Significant

CONCLUSIONS

The following conclusions were drawn based from the finding of the study:

1. Reflective journal writing is valued by the respondents in terms of motivation, improving learning, and convenience.

2. The level of writing skill of the respondents needs improvement in terms of content, organization, language use, vocabulary and mechanics.

3. The respondents' perceived values toward reflective journal writing do not affect their writing skill.

4. Female respondents have better writing skills than male as well as the respondents from the College of Teacher Education have the best writing skills among the students from the six colleges.

RECOMMENDATIONS

From the findings and conclusions of the study, the following are hereby recommended:

1. Reflective journal writing must be continued due to its perceived values specifically in increasing motivation, improving learning, and convenience.
2. Intensive instruction and writing remediation must be done specifically on organization, content, vocabulary, language use , and mechanics.
3. Conduct study regarding the factors behind students' poor writing productions such as kinds of language learning activities , time spend in writing, type of writing activities done, and the techniques or strategies employed by the students .
4. Conduct mentoring of students' writing and intensify journal writing activity to students from different colleges who were not able to attain writing skill.

Conduct action research on the students' writing skills.

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ORGANIZATIONAL POLITICS, LEADERSHIP STYLE PREFERENCE, AND PUBLIC SERVICE MOTIVATION: A STRUCTURAL MODEL ONORGANIZATIONAL COMMITMENT OF GOVERNMENT EMPLOYEES IN DAVAO CITY

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ABSTRACT

The unrelenting concern for organizational commitment in the public sector prompted the conduct of this study. The author wanted to ascertain a structural model of organizational commitment for government employees. Four hundred government employees in Davao City were recruited using stratified random sampling, and data were gathered thru survey questionnaires. Statistics used were Pearson r, which determined the significance of the relationship between organizational politics (OP), leadership style preference (LSP) and public service motivation (PSM) and organizational commitment (OC); Stepwise Multiple Regression Analysis, which identified the best predictor of organizational commitment; and Structural Equation Modeling (SEM), which determined the model that best fits organizational commitment. Results revealed that organizational politics and leadership style preference are significantly correlated with organizational commitment, suggesting that OP & LSP are important contexts in OC. Additionally, results revealed that organizational commitment is highly influenced by delegative leadership style and general political behavior. Moreover, it was found that structural model 5 in standardized solution was the generated best fit model, which indicates that organizational politics (OP) and public service motivation (PSM) can significantly shape Organizational Commitment. The findings of the study suggest that administration should provide avenues for better politics to operate in the workplace and that PSM should be fueled more in the organization by providing the motivational needs of employees.

Keywords: ***Public Administration, Organizational Politics, Leadership Style Preference, Public Service Motivation, Organizational Commitment, Structural Equation Modeling, Davao City, Philippines***

INTRODUCTION

Rationale of the Study

The last two decades saw organizational commitment as an unrelenting concern predominantly in the public sector (Ajilon Australia Pty Ltd., 2013, Choong, Wong, & Lau, 2011). Organizational commitment, which is supposed to be a dogma of employees in whatever type of organization, is almost absent, making it hard for an organization to keep pace with the race of which it is a participant (Ahmad, 2014; Çetin, Basım, Aydoğan, 2011).

Consequently, an organization that is lacking highly committed employees becomes unsuccessful in a rigid and global race; it diminishes and dies (Cohen, 2006).

Being that, some scholars and researchers continue to search for this seemingly elusive behavior due to its multidimensional character (Bouckenooghe & Minbashian, 2014). Many a a research have been conducted addressing organizational commitment as an important part of the employee's psychosocial state because employees who experience high organizational commitment are theorized to engage in many behaviors such as citizenship activities, high job performance, and attachment to their workplaces, which are believed to be beneficial for the organization (Darolia, Darolia, & Kumari, 2010).

Undeniably, organizational scientists continue to come up with many definitions of organizational commitment differentiated only by minute variation and develop copious scales to measure it. For instance, Mowday, Steers, and Porter (1979) defined organizational commitment as the degree of an individual's sense of loyalty toward an organization in relation to the experiences s/he has with such organization. Loyalty, in the context of organizational commitment, encompasses an individual's willingness to expend effort to further the goals of the organization and to align his/her goals and values with that of the organization.

Moreover, Meyer, Stanley, Herescovitch, and Topolnytsky (2002) have defined organizational commitment as a psychological link between an employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization. This gives rise to the emotional attachment and a sense of allegiance that employees develop the organization. Furthermore, they referred to organizational commitment as the essence of collaboration and teamwork whereby the success of an organization is dependent upon.

Although much research has been carried out in the international setting investigating factors that may have link to organizational commitment such as turnovers, organizational citizenship behavior, job performance, role stress, empowerment, job security and employability, leadership distribution, and the like, but regrettably, the researcher has not come across of a study that models organizational politics, leadership style preference, and public service motivation on organizational commitment especially in Davao City. Hence, the researcher is persuaded to conduct this study to fill the gap in the literature covering these subjects, especially in the local context.

Findings of this study will give organizations some significant information on what makes employees be totally committed to their organization. Additionally, this study would significantly contribute to bringing a New Public Management (NPM) approach in modernizing the public sector insofar as the variables in this study are concerned.

STATEMENT OF THE PROBLEM

This study tried to determine the best fit model for organizational commitment, particularly seeking answers to the following questions:

1. What is the level of organizational politics among government employees in Davao City in terms of the following indicators: *general political behavior*, *go along to get ahead* and *pay and promotion policies*?
2. What is the level of leadership style preference among government employees in Davao City in terms of being *authoritarian*, *participative*; and *delegative*?
3. What is the level of public service motivation among government employees of Davao City in terms of these indicators: *attraction to public participation*, *commitment to public values*, *compassion*, and *self-sacrifice*?
4. What is the level of organizational commitment among government employees in Davao City in terms of these types of commitments: *affective commitment*, *normative commitment*, and *continuance commitment*?
5. Is there a significant relationship between organizational politics and organizational commitment; leadership style preference and organizational commitment; and public service motivation and organizational commitment?
6. Which of the independent variables best determines organizational commitment?
7. Which among the hypothesized models is the best fit model for organizational commitment?

Hypothesis

Hypotheses in this study were tested at 0.05 levels of significance:

1. No significant relationship is present between organizational politics and organizational commitment; leadership style preference and organizational commitment; and public service motivation and organizational commitment
2. Organizational politics, leadership style preference, and public service motivation do not determine organizational commitment.
3. There is no best fit model for organizational commitment

Conceptual Framework

The interplay of variables of this study is shown in Figure 1, a conceptual model of the study showing a direct causal relationship of organizational politics, leadership style preference, and public service motivation on organizational commitment

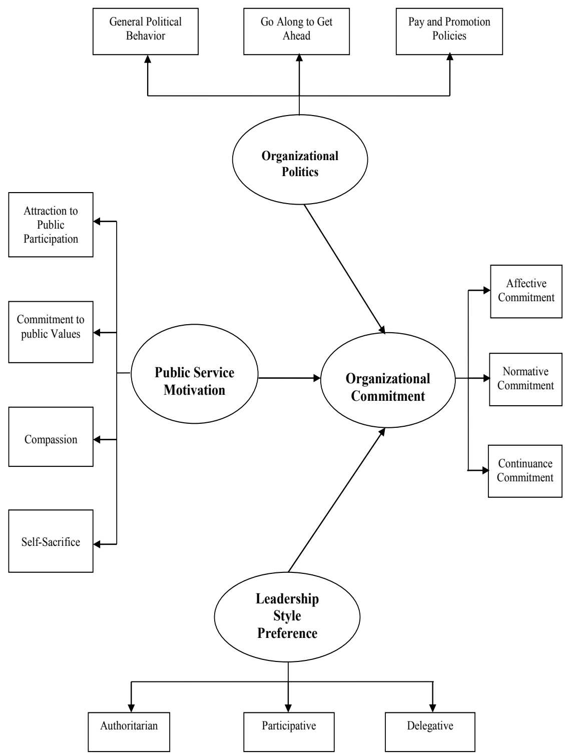

Figure 1. A Conceptual Model of the Study Showing a Direct Causal Relationship of Organizational Politics, Leadership Style Preference, and Public Service Motivation on Organizational Commitment

The exogenous variables in this study were organizational politics, leadership style preference, and public service motivation, while organizational commitment was the endogenous variable. The primordial interest of this study was finding the extent of the regression paths from the latent variables to the observed variables. It should be noted that latent variables were not observed and directly measured but were correlated with the observed variables.

Organizational politics (Kacmar and Carlson, 1997), which is a latent variable has three observed variables, namely; General political behavior, which refers to the self-serving rules observed by employees in an attempt to build themselves up by tearing others down; going along to get ahead, where employees are encouraged to speak out their minds or they may just as well keep their silence a accept a particular issue; and pay and promotion policies, which refers to actions pertaining to pay and promotion that are politically motivated.

Another latent variable, leadership style preference (The Board of Regents of the University System of Georgia, 2008), also has three observed variables, namely; Authoritarian or autocratic style, which refers to a leader instructing the subordinates on what to do, when to do, and how to do a certain task; participative or democratic style, where the leader listens to inputs from team members and a group decision for decision making; and delegative or laissez-faire, where the leader offers very little guidance and group members are left alone basically to decide on what they want to do. The next latent variable is public service motivation (Kim, Vandenabeele, Andersen, Cerase, Christensen, et al., 2010). It has four observed variables, such as: Attraction to public participation, which pertains to the employees being lured by meaningful public service, and their desire to contribute to the common good; commitment to public values that makes employees feel obligated to perform based on ethical standards so that citizens and future generations can rely on continuous provision of honest public service; compassion, which pertains to a feeling of sympathy for government employees towards the underprivileged and the striving, to treat them fairly considering their welfare; and self-sacrifice, which refers to the employees' beliefs of putting civic duty before self and working to a good plan of making a better life for the poor.

The last latent variable is organizational commitment (Jaros, 2007), with three observed variables, namely; *Affective commitment*, which refers to the emotional attachment of employees towards their organization; *normative commitment*, which refers to the perspectives of employees as part of the organization; and *continuance commitment*, which refers to the beliefs of the employees as they contemplate on staying or leaving the organization.

This study has deduced the model framework into two sub-models. These are the measurement model, which defines the relationship between the observed and unobserved variables, and the

Models 1 to 4 are subsequently presented here. Expectedly, these are not the best fit models, but are derivatives of the hypothesized models that were important in determining the best fit model for organizational commitment. The best fit model for organizational commitment (Model 5) is presented under findings, with the same subtitle.

Model 1, shown in figure 2, shows the interrelationships of the exogenous variables organizational politics, leadership style preference, public service motivation and their influence on the latent endogenous variable, organizational commitment. Model 2, shown in figure 3, shows the direct causal link of leadership style preference and public service motivation on organizational commitment. Model 3 (figure 4) shows the direct causal link between organizational politics and public service motivation on organizational commitment, and Model 4 (figure 5) shows the direct causal link of organizational politics and leadership style preference on organizational commitment.

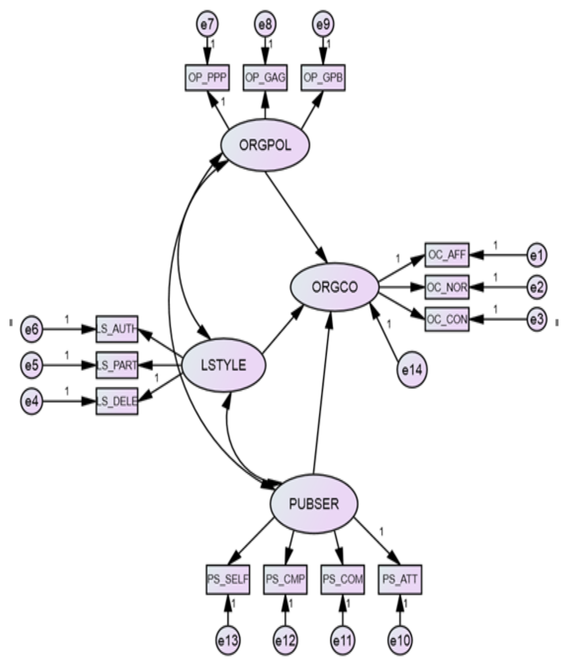

Figure 2. Model 1 Showing the Interrelationships of the Exogenous Variables: Organizational Politics, Leadership Style Preference, Public Service Motivation and their Influence on the Latent Endogenous Variable, Organizational Commitment

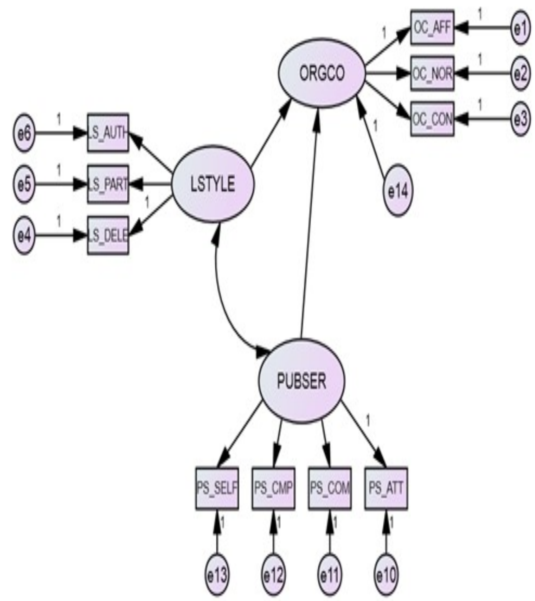

Figure 3. Model 2 Showing the Direct Causal Link of Leadership Style Preference and Public Service Motivation on Organizational Commitment

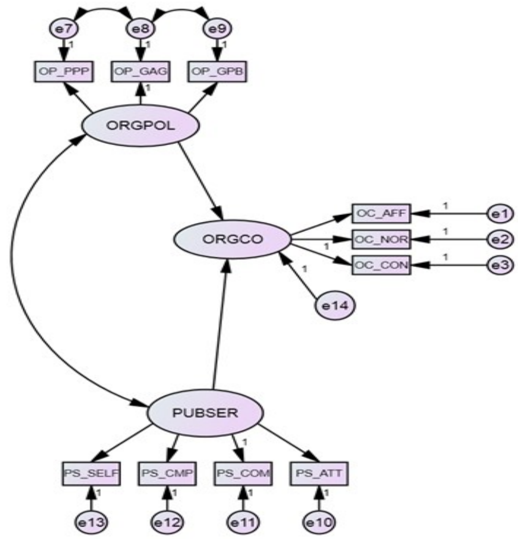

Figure 4. Model 3 Showing the Direct Causal Link between Organizational Politics and Public Service Motivation on Organizational Commitment

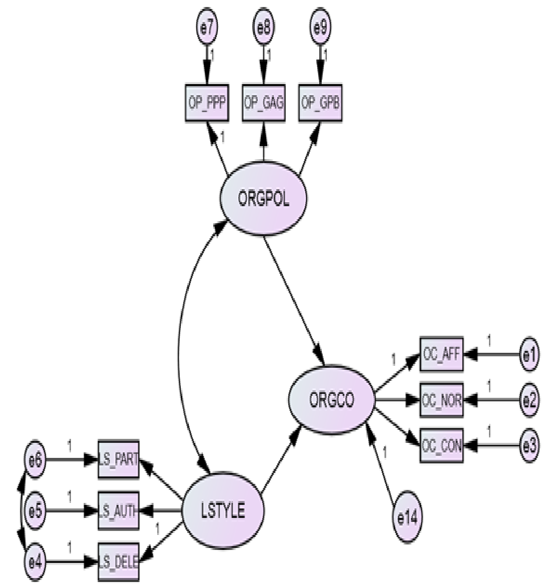

Figure 5. Model 4 Showing the Direct Causal Link of Organizational Politics and Leadership Style Preference on Organizational Commitment

METHOD

This is a quantitative study that used Structural Equation Modeling (SEM) because its goal was to find the best fit structural model of organizational commitment. The use of SEM can impute relationships between unobserved constructs (latent variables) and observed variables (Hancock, 2003); hence it can ascertain the factors that establish the causal relationship between and among dependent and independent variables.

In generating the best fit model, Structural Equation Model was used where a structure for the covariance between the observed variables was established, providing valid and meaningful results (Byrne, 2013). SEM provides consistency in research where a goodness of fit must be arrived at (Iacobucci and Churchill 2010; Chen, Curran, Bollen, Kirby & Paxton, 2008).

In addition, this study employed causal relationship analysis in describing the statistical associations of variables that have varying scale levels and used mathematical models and theories related to the phenomena (Christensen, Johnson & Turner, 2014; Crossman and Scherer, 2015; Ullman & Bentler, 2003). This study, therefore, examined the interrelationships of organizational politics, leadership style preference, public service motivation and organizational commitment.

In determining the sample population for this study, stratified random sampling was used to not risk other groups of not being included. Use of this sampling technique ensured a proportional representation of samples from key subgroups of the target population. The homogeneity of the strata signals that the use of stratified random sampling was more precise than using simple random sampling only (Australian Bureau of Statistics, 2006). Four hundred employees in different offices in the city hall of Davao were recruited to respond to the survey. Moreover, the study was cross-sectional in that the data were taken at one specific point in time from each of the respondents.

Research Instrument

This study used adapted questionnaires in collecting information. Items were modified to fit the objectives of the study. Questionnaires were adapted from the works of Kacmar and Carlson (1997) for organizational politics; the Board of Regents of the University System of Georgia, (2008) for leadership styles preference; Kim, Vandenabeele, Andersen, Cerase, Christensen, et al. (2010) for Public Service Motivation; and Jaros (2207) for organizational commitment.
Already, these questionnaires have been widely used by various scholars in their investigation of the same topics. However, since the items were modified, a pool of experts has validated the items in the questionnaires. In addition, questionnaires were subjected to validity and reliability testing using Cronbach's Alpha.

Thirty (30) permanent government employees who were currently enrolled in UM graduate school were requested to answer the questionnaires. Each questionnaire was provided with corresponding response scale for the respondents to choose from: 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree, and 1 for strongly disagree. Below is the interpretation of the mean results of the data.

Scale and Interpretation of the Data

Mean Scale	Descrip-tive Level	Interpretation
4.20 to 5.00	Very High	This means that organizational politics, leadership style preference, public service motivation or organizational commitment is always manifested by the respondents.
3.40 to 4.19	High	This means that organizational politics, leadership style preference, public service motivation or organizational commitment is most of the time manifested by the respondents.
2.40 to 3.39	Moder-ate	This means that organizational politics, leadership style preference, public service motivation or organizational commitment is seldom manifested by the respondents.
1.80 to 2.59	Low	This means that organizational politics, leadership style preference, public service motivation or organizational commitment is almost never manifested by the respondents.
1.00 to 1.79	Very Low	This means that organizational politics, leadership style preference, public service motivation or organizational commitment is never manifested by the respondents.

On the other hand, below is the standard criterion statistics used as basis in evaluating the goodness of fit for structural models:

Chi-square	large value
P value	> 0.05
Chi Square/Degrees of Freedom (CMIN/DF)	<0.05
Normative Fit Index	> 0.95
Comparative Fit Index	> 0.95
Goodness of Fit Index	> 0.95
Tucker-Lewis Index	> 0.95
Root Mean Square Error of Approximation (RMSEA)	<0.05
P close	> 0.0

FINDINGS

Level of Organizational Politics, Leadership Style Preference, Public Service Motivation and Organizational Commitment of Davao City Hall Employees

Level of Organizational Politics

Table 1 displays the level of organizational politics of Davao City employees. The data showed that the overall level of employees' organizational politics is high (M=3.82; SD=.494). This means that Davao City employees have most of the time, manifested the political behaviors stated in the questionnaires. A close look at the data set would tell that the employees put higher concern on pay and promotion policies (M=4.29; SD=.542). This means that employees value promotions so much that they always see to it that they are made based on relevant policies, and that should a raise in salary be made, it should be consistent with the published policies or the law.

Consequently, in the go ahead to get along indicator, the respondents registered a mean score of 3.98, which is described as high level. This means that employees most of the time understand that there are times when things are better left unsaid rather than fight the system. They are convinced that rocking the boat is not always the best option, but that telling others what they want to hear is better than telling the truth.

However, employees also believe that it is not good to step on other's toes to get ahead of him. This was shown in their low score in general political behavior (M=2.29; SD=.629). They are convinced that it is good to build each other up than to pull each other down. Although, they believe that there are always that influential groups or figures that employees do not want to ever cross. In other words, employees already know their boundaries and are careful not to cross the line. As Yilmaz, Ozer & Gunluk (2014) put it, a good understanding of the political behavior or politics in the organization can earn an employee the most needed power to be able to protect himself and his current position.

Although organizational politics may have a negative connotation for others because it can have a negative effect on social groupings, information sharing, and cooperation within the organization (Goldstein and Read, 2009; Goodman, Evans, and Carson, 2011; Gori, 2016;

Larsen, 2017), but Davao City employees used organizational politics in creating a right political landscape in the functioning of the organization (Bolander, 2011). Because of organizational politics, they can work things out well in favor of the organization.

Table 1
Level of Organizational Politics

Indicator	SD	Mean	Descriptive Level
General Political Behavior	.629	2.29	Low
Go Along to Get Ahead	.755	3.98	High
Pay and Promotion Policies	.542	4.29	Very High
Overall	**.494**	**3.82**	**High**

Level of Leadership Style Preference

Table 2 shows the level of leadership style preference of Davao City employees. The overall mean score is .386, with a standard deviation of 3.86. The score is described as high level of preference. Also, all indicators got high mean scores: authoritative (M=3.47, SD=.515); Participative (M=3.96, SD=.581); and Delegative (M=4.16, SD=.406). This means that employees do not have an issue as to the kind of leadership style their superiors are portraying because they can easily adjust to that style of leadership. Besides, supervisors or leaders usually use blended type of leadership styles so that employees under them are used to blended leadership styles. In Malaysia, for example, employees prefer leaders who delegate although autocratic style and participative styles of leadership are at work (Ababneh, 2009; Hamzah, Saufi and Wafa, 2002; Jayasingam, Ansari and Jantan, 2010). In other words, leaders do not only use one style of leadership but most commonly use blended style of leadership, and employees get used to this brand of leadership in time (Appelbaum, Audet, et al. 2003; Collinson & Collison, 2015; Hourston, 2013).

Table 2
Level of Leadership Style Preference

Indicator	SD	Mean	Descriptive level
Authoritarian	.515	3.47	High
Participative	.581	3.96	High
Delegative	.406	4.16	High
Overall	**.386**	**3.86**	**High**

Level of Public Service Motivation

Table 3 shows the level of public service motivation of Davao City hall employees. PSM was high (M=3.99, SD=.490), which means that generally, these employees have good intentions in their participation to public service (Perry et al, 2008) although it cannot be denied that each one has its own personal motives in joining public service (Perry et al., 2010; Vandenabeele, 2007). For one, Pandey et al. (2008) argued that people want to be employed in government sector for love of people, and a lucrative financial return comes in second.

Moreover, Kim et al. (2010) averred that public service is a meaningful task that is why people want to become part of the government service. Interestingly, they claimed that compassion and self-sacrifice is what draw people to work in the government as they will be serving deprived population. However, Tria and Valotti (2012) were quick to retort that jobs in the public sector are not intended for self-sacrifice and that employees are not expected to be self-sacrificial in the performance of their duties, but to follow the norms and standards of government service. In other countries however, like in Belgium, Italy and Switzerland, public employees are either directly or indirectly expected to perform self-sacrifice in the performance of their duties, although not a general rule.

Table 3
Level of Public Service Motivation

Indicator	SD	Mean	Descriptive level
Attraction to Public Par-	.600	4.04	High
Commitment to Public	.642	3.98	High
Compassion	.750	3.87	High
Self-sacrifice	.571	4.05	High
Overall	**.490**	**3.99**	**High**

Level of Organizational Commitment

The result of this study revealed an overall *high level* of organizational commitment of Davao City employees (M=4.06, SD=.507). The data set in Table 4 also revealed that high manifestations of affective commitment (M=4.08, SD=.577) normative commitment (M=4.01, SD=.607) and continuance commitment (M=4.09, SD=.596).

By affective commitment, it means the feelings and emotions of employees towards their organization; by normative commitment it means the viewpoints of employees being a member of the organization. By continuance commitment, it means employees' contemplation in staying with such organization.

A close look at the data on affective commitment showed that the respondents manifested a high inclination in all eight indicators. In other words, the respondents claimed that they feel they are most of the time part of the organization and that they feel that they are being accepted by the organization so that they are already attached to it. This gave them a pleasant feeling that they wanted to spend the rest of their career life with the organization. They only have good things to say about the organization to other people. They feel as though problems of the organization are their own and that their organization bears a personal meaning to them. But then again because things are changing, they still think that they could easily become as attached to another organization as they are to their present organization.

Moreover, as for normative commitment, the respondents feel that getting out of the organization will shake some personal and even familial affairs. They feel that if they get out of the organization the comfort that they are enjoying will be cut, so leaving the organization would not be a good choice as there are also no alternatives for them outside the organization.

Furthermore, the respondents manifested a high level of continuance commitment in that they believe that staying in the organization throughout their career life would be for their advantage. However, they do not also condemn those who leave the organization if they leave the organization in a manner that is acceptable.

The foregoing results imply that Davao City employees are strongly attached to their organization. Tella, Ayeni, and Popoola (2007) disclosed that those employees who have strong emotional attachments to the organization are those who are likely to stay. Building a connection between that statement and the result of this study would conclude that the respondents have the motivation that is expected from them. Just as Jaros (2007) and Tella, Ayeni, and Popoola (2007) had long declared that employees who are emotional attached to their organization feel that they belong to the organization and become more involved in the activities of the organization. They found personal meaning to the vision, mission, and goals of the organization and embraced them as their own.

Table 4
Level of Organizational Commitment

Indicator	SD	Mean	Descriptive
Affective Commit-	.577	4.08	High
Normative Commit-	.607	4.01	High
Continuance Commit-	.596	4.09	High
Overall	**.507**	**4.06**	**High**

Significance of the Relationship between Organizational Politics, Leadership Style Preference, Public Service Motivation and Organizational Commitment

Table 5 shows the correlation data between OP, LSP, PSM, and OC. The data revealed that organizational politics and organizational commitment are significantly correlated as evidenced by the correlation coefficient of .113, which is significant at $p<.05$. This suggests that organizational politics is an important context in organizational commitment. Darolia, Darolia, & Kamari (2010) suggested that organizational politics is a subjective state in which organizational members perceive themselves or others as intentionally seeking selfish ends in an organizational context when such ends are opposed to those of others. More recent studies, on the other hand, suggested that it should be regarded as pervasive and necessary for normal business functioning, and a simple fact of organizational life (Yilmaz, Ozer, & Gunluk, 2014).

Moreover, the data revealed that leadership style preference is positively correlated with organizational commitment as shown by the correlation coefficient of .108 with a p-value of 0.31. The result means that there is a significant relationship between the variables. This means that leadership style preference and organizational commitment are positively connected and that the leadership style of heads of offices can be a factor for employees to be committed to the organization (Ababneh, 2009; Hamzah, Saufi and Wafa, 2002; Ansari, Jayasingam, and Jantan, 2010). It does not matter as to what kind of leadership style being portrayed by the head, but that a leadership style being portrayed by the head, but that a leadership style can create an effect on the degree of commitment of employees (Afshari, and Gibson, 2015; Collinson, M. & Collison, D., 2015; Hourston, 2013).

Table 5.

Significant Relationship between Organizational Politics, Leadership Style Preference, Public Service Motivation and Organizational Commitment

		Organizational Commitment	Affective Commitment	Normative Commitment	Continuance Commitment
Organizational Commitment	Pearson Correlation	1	.870**	.794**	.897**
	Sig. (2-tailed)		.000	.000	.000
Organizational Politics	Pearson Correlation	.113*	.001	.259**	.023
	Sig. (2-tailed)	.024	.990	.000	.649
Leadership Style Preference	Pearson Correlation	.108*	.009	.213**	.049
	Sig. (2-tailed)	.031	.857	.000	.331
Public Service Motivation	Pearson Correlation	.026	-.024	.061	.029
	Sig. (2-tailed)	.599	.625	.227	.559

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
c. Listwise N=400

Regression Analysis Showing the Extent of the Influence of Predictor Variables on Organizational Commitment

Table 6 presents the findings of stepwise regression analysis which illustrates the significant predictors of organizational commitment in terms of the observed variables of the study. The analysis shows that the standard coefficient of leadership style preference (delegative) has the highest Beta of .157. This illustrates that organizational commitment is highly influenced by delegative leadership style. Similarly, the analysis presents that organizational politics (general political behavior) is a function of organizational commitment as shown by a Beta coefficient of .105. The F-value of 6.608 with a corresponding p-value of 0.000 suggests that the regression model is significant which means the rejection of null hypotheses in the indicated observed latent variables. It further indicates that there is a variable that predicts organizational commitment of government employees in Davao City.

Table 6

Extent of the Influence of Predictor Variables on Organizational Commitment

	Organizational Commitment			
Variables	B	Beta	*T*	*Sig.*
(Constant)	3.465		11.447	.000
LSP_ Delegative	.196	.157	3.166	.002
PSM_ Self-Sacrifice	-.103	-.116	-2.341	.020
OP_ General Political Behavior	.085	.105	2.142	.033
R	.218			
R^2	.048			
F	6.608			
P	.000			

Legend:
LSP = Leadership Style Preference – Delegative
PSM = Public Service Motivation – Self-Sacrifice
OP = Organizational Politics – General Political Behavior

The F-value of 6.608 with a corresponding p-value of 0.000 suggests that the regression model is significant which means the rejection of null hypotheses in the indicated observed latent variables. It further indicates that there is a variable that predicts organizational commitment of government employees in Davao City.

The combined predictive power of the three significant latent variables is manifested in the adjusted R^2, which is .048. This means that the combination of these three variables contribute 4.8 percent of the organizational commitment of government employees in Davao City, while the remaining 95.2 percent can be attributed to other variables beyond the scope of the study.

BEST FIT MODEL

In identifying the best fit model, all the indices included must consistently fall within acceptable ranges. Chi-square/degree of freedom value should be between 0 and 2, with its corresponding p-value greater or equal to 0.05. Root Mean Square of Error Approximation value must be less than 0.05 and its corresponding pclose value must be greater or equal to 0.05. The other indices such as Normed Fit Index, Tucker-Lewis Index, Comparative Fit Index, and Goodness of Fit Index must be all greater than 0.95. The summary of Goodness of Fit Measures of the five models is is presented in Table 7.

Table 7
Summary of Goodness of Fit Measures of the Five Generated Models

Model	P-value (>0.05)	CMIN / DF (<5)	NFI (>0.95)	TLI (>0.95)	CFI (>0.95)	GFI (>0.95)	RMSEA (<0.05)	Pclose (>0.05)
1	.000	24.918	.689	.598	.696	1.000	.245	.000
2	.000	5.844	.901	.882	.916	.914	.110	.000
3	.000	2.897	.933	.932	.954	.959	.069	.032
4	.000	30.096	.717	.565	.722	.820	.270	.000
5	.285	1.157	.980	.995	.997	.988	.020	.951

Legend:
CMIN/DF - Chi-Square/Degrees of Freedom *NFI - Normed Fit Index*
GFI - Goodness of Fit Index *TLI - Tucker-Lewis Index*
RMSEA - Root Mean Square of Error Approximation *CFI - Comparative Fit Index*

Figure 6 displays the best-fit model, a generated structural model 5 in standardized solution. Results indicate that the latent variables Organizational Politics (OP) and Public Service Motivation (PSM) have a significant contribution to the latent variable, Organizational Commitment.

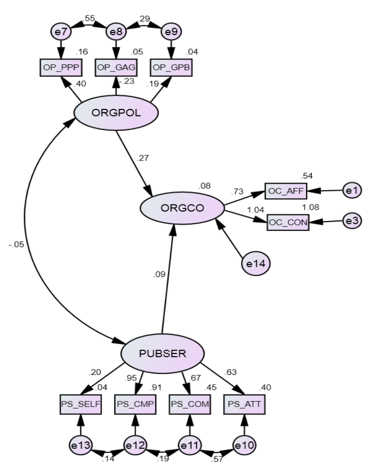

Figure 6. Model 5 – The Best Fit Model for Organizational Commitment

Legend:
OP_PPP - Organizational Politic_ Pay and Promotion Policies
OP_GAG- Organizational Politics_ Go Along to Get Ahead
OP_GPB- Organizational Politics_ General Political Behavior
OC_ AFF- Organizational Commitment_ Affective
OC_CON-Organizational Commitment_ Continuance
PS_SEL- Public Service Motivation - Self-Sacrifice
PS_CMP - Public Service Motivation - Commitment to Public Values
PS_COM - Public Service motivation_ Compassion
PS_ATT - Public Service Motivation_ Attraction to Public Participation

Model 5 is the best fit model for organizational commitment. The model is said to be best fit when all measures have met the required standard values for goodness of fit index. In this model, all indices consistently indicate a very good fit as indicated by CMIM/DF=1.157; RMSEA= 0.020, pclose = 0.951 and the indices such as NFI, TLI, CFI, and GFI are all greater than 0.95, which is the standard value. All derived data fall within each criterion for best fit. Thus, there is no need to find another model for testing, because model 5 is already found to be the best fit among all tested models. Therefore, the hypothesis that there is no best fit model for organizational commitment is rejected. It could be stated then that there is a model that best fits organizational commitment of government employees.

Additionally, Model 5 shows that organizational politics, with such indicators as *pay and promotion policies*, *go along to get ahead*, and the *general political behavior* can best predict organizational commitment. Similarly, public service motivation, with such indicators as *self-sacrifice*, *commitment to public values*, *compassion*, and *attraction to public participation* are the best predictors of affective and continuance organizational commitment. Also, Model 5 also shows the interrelationship of organizational politics and public service motivation and their direct causal relations to organizational commitment.

CONCLUSIONS

Based on the foregoing findings, the following conclusions are drawn.

The researcher concludes that there is a model for organizational commitment, which can be generalized across organizations and institutions, private or public. Considering that organizational politics and public service motivation are strong predictors of organizational commitment, administrators will need to channel employees' viewpoints about organizational politics into a positive perspective to create a right political landscape in the organization. Likewise, organizations should promote public service into a meaningful task, inculcating the virtues of self-sacrifice, commitment to public values, attraction to public service and compassion among employees. When all these are imbibed and lived by employees, then there will be no more corruption in government, and the Philippines will soar on par with other renowned countries not just in Asia but the world.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the researcher proposes the following recommendations:

1. Since it is proved that organizational politics and public service motivation are models of organizational commitment, the administration should provide better avenues for better politics to operate in the workplace, although with much caution. Also, public service motivation should be fueled more in the organization by providing the motivational needs of employees, both for tangible motivational factors and intangible ones.
2. Another research may be conducted that will determine another model for organizational commitment. There are still more variables on the organizational commitment that may be explored, which can add to the new knowledge in the field of public administration.

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Quo Vadis: EMPLOYABILITY OF COLLEGE OF TEACHER EDUCATION GRADUATES (2012-2016) OF OCCIDENTAL MINDORO STATE COLLEGE

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ABSTRACT

The College of Teacher Education, in its pursuit to offer relevant and responsive undergraduate training for prospective teachers, conducted a tracer study. Specifically, it aimed to determine the employment status and employability of its graduates, as well as the usefulness of its program and curricular content. The study used the descriptive method of research. One hundred twenty-four graduates were randomly chosen and were surveyed using a survey instrument adapted from the Philippine Normal University. The results showed that the employability of the graduates is high, and that majority of them are tenured as permanent teachers. Most have earned their license, with some even earning double eligibility from both the Professional Regulation Commission (PRC) and the Civil Service Commission (CSC). Majority perceive that the curricular programs of the college are relevant, and that the skills and values they have learned in college are useful.

Keywords: ***Tracer Study, Employability, Employment, Teacher Education, Program Appraisal***

INTRODUCTION

Tracer study is defined as an impact assessment tool where the "impact on target groups is traced back to specific elements of a project or programme so that effective and ineffective project components may be identified" (ILO Thesaurus, 2005). In educational research the tracer study is sometimes referred to as a graduate or alumni survey since its target group is former students.

Schomburg (2003, p.36) states that graduate surveys are popular for "analysis of the relationship between higher education and work." Such surveys provide feedback not only on the effectiveness of the programs of the school, usefulness of the programs and courses, as well as the readiness of the graduates to enter their respective fields of work.

In the Philippines, the Commission on Higher Education requires all HEI's to conduct tracer study and is equally reflected as one of the required documents by any higher education accrediting body such as Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP), Inc. By conducting a survey on the cohort of graduates from specific institution, profession, discipline, level of education, their employment characteristics, competencies and skills development, and have a comparative analysis, the information gained from these can be used by the graduate's Alma mater and other education stakeholders for curriculum development and other emerging reforms (Gines, 2014)

The College of Teacher Education of Occidental Mindoro State College, as the premier Teacher Education Institution in the province, in response to the ever changing educational battlefield, continuously try to determine what the graduates need to enter into the work force, and how to achieve them.

This study is an avenue to determine how well the graduates fit, and adapt into the work force.

OBJECTIVES OF THE STUDY

The study aimed to:

1. Establish the profile of the CTE graduates in terms of:
    a. Curricular program earned;
    b. Major of Specialization;
    c. Employment Status (Full time, Part-Time, Self-Employed, Unemployed);
    d. Sector of Employment (Academe, Non-Academe, Self-Employed, Unemployed)
    e. Eligibilities Earned (LET, CSC, others)

2. Determine the extent to which the competencies learned in CTE curricular programs contributed to the development of the graduates'
    a.communication skills
    b.human relation skills
    c.leadership skills
    d.problem solving skills
    e.research skills
3. Determine the graduates' perception of the usefulness of the overall course curriculum for professional work in terms of:
    a.General Education;
    b.Professional Course;
    c.Seminars;
    d.Content/Major Courses; and
    e.Thesis
4. Determine the graduates' perception of the usefulness of the core values learned in college in terms of:
    a.Integrity;
    b.Teamwork;
    c.Excellence;
    d.Social responsibility;
    e.Innovations; and
    f.Patience

METHODOLOGY

The study was conducted in Occidental Mindoro on 2012-2016. The study employed descriptive method of research. One hundred twenty-four (124) graduates of the College of Teacher Education from 2012-2016 were surveyed to determine the employability status of the CTE graduates. A survey on the employment characteristics of the graduates, and the extent to which the Curricular Program contributed to the development of the Graduates' skill and employment was done.

The respondents were chosen randomly. A survey instrument patterned and adapted from the Philippine Normal University was used.

Descriptive statistics such as frequency, percentage, and weighted mean were used in the study.

Findings

Profile of the Graduates of the College of Teacher Education A.Y. 2012-2016

Table 1 shows the profile of the respondents in terms of program earned, employment (status and sector), as well as the eligibilities earned.

Majority of the respondents were graduates of Bachelor of Elementary Education or BEEd (68.55%). Most of them of the respondents were employed in the Academe (87.10%) and most are permanent teachers (29.84%). Majority has earned their teaching license (83.06%), which is a pre-requisite in teaching in public schools and many private institutions.

Table 1. Profile of the Respondents.

Profile	Indicators		Frequency	Percentage
Curricular Program Earned	BSEd	English	11	8.87
		Filipino	15	12.10
		Mathematics	13	10.48
	BEEd	Generalist	85	68.55
			124	**100.00**
Employment Status	Permanent		37	29.84
	Temporary		11	8.87
	Substitute		5	4.03
	PARA Teacher		36	29.03
	others		35	28.23
			124	**100.00**
Sector of Employment	Academe		108	87.10
	Non-Academe		5	4.03
	Self-Employed		0	0.00
	Unemployed		11	8.87
			124	**100.00**
Eligibilities Earned	BLEPT		103	83.06
	CSC		1	0.81
	Both CSC and BLEPT		1	0.81
	others		19	15.32
			124	**100.00**

Perceived contribution of the Competencies earned in the College programs to the graduates

Table 2 presents the level by which graduates perceive the usefulness of the competencies they have earned in the college. Teaching skills was perceived to be the most useful, with a mean of 4.48 (very useful), followed by communication skills (4.42), which are foundation skills teachers.

The results show that the graduates believe that their communication skills, as imparted to them by the College, are the most useful in delivering their jobs. This is supported by Hereford (n.d.) who emphasized the importance of communication skills. According to Hereford, “Good communication skills are key to success in life, work and relationships. Without effective communication, a message can turn into error, misunderstanding, frustration, or even disaster by being misinterpreted or poorly delivered.”

Table 2. Graduates’ perceived usefulness of competencies earned in college

Competencies Earned	Mean	Interpretation
Communication Skills	4.42	Very Useful
Technical Skills	3.69	Useful
Problem-Solving Skills	3.91	Useful
Teaching Skills	4.48	Very Useful
Human Relation Skills	4.05	Useful
Information Technology Skills	3.92	Useful
Critical Thinking Skills	4.04	Useful
GRAND MEAN	**4.07**	Useful

Scale of Interpretation: 5.00-4.20 Very Useful 2.59-1.80 Seldom Useful
4.19-3.40 Useful 1.79-1.00 Not at All useful
3.39-2.60 Somewhat Useful

Graduates’ perceived usefulness of the entire course curriculum

Table 3 shows the how the graduates perceived the usefulness of the content of the program curriculum of the college.

With a grand mean of 4.23, the overall perception of the graduates relative to the content of the program curriculum is very useful. Graduates believe that their professional education courses were very useful (4.97), along with their general education (4.72).

It is noteworthy that educational thrusts nowadays enjoin teachers to submit and conduct action researchers for the expansion of knowledge base and to address common classroom problems. In fact, teachers are empowered when they are able to collect and use data in making informed decisions about their own schools and classrooms (Hine, 2013; Book, 1996; Fueyo & Koorland, 1997; Hensen, 1996). Hence, providing graduates with the necessary skills and knowledge in research takes the students a step closer to being empowered teachers, both in making decisions in the class and in understanding phenomena that may affect the quality of learning. Although, due to lack of opportunities for research in the field, graduates perceive Thesis (3.21) or thesis making as somewhat useful.

Table 3. Perceived usefulness of the program curriculum

Curriculum Content	Mean	Interpretation
General Education	4.72	Very Useful
Professional Course	4.97	Very Useful
Seminars	4.04	Useful
Content/Major Courses	4.23	Very Useful
Thesis	3.21	Somewhat Useful
GRAND MEAN	**4.23**	**Very Useful**

Scale of Interpretation: 5.00-4.20 Very Useful 2.59-1.80 Seldom Useful
4.19-3.40 Useful 1.79-1.00 Not at All useful
3.39-2.60 Somewhat Useful

Graduates’ Perception of the usefulness of the Core Values learned in the College

Table 4 depicts the graduates’ perceived usefulness of the core values they have learned in College.

Patience (4.53) which is a very fundamental value among teachers, was perceived as very useful. The graduates also perceived that Integrity (4.40), Teamwork (4.31), Excellence (4.34), and Social Responsibility (4.5) are useful. Innovations (4.13) was perceived as useful. With an overall mean of 4.37, the graduates perceived that the values they have learned in the college are very useful.

The graduates’ regard on the importance of patience in a teacher education program graduate is further accentuated by Wormeli (n.d.). According to Wormeli, “Patience in teaching means we dedicate considerable class time to building prior knowledge in students where there is none because we know that nothing is learned well unless it connects to something already in storage. Accepting this precept requires we spend time explaining the political/economic context of great battles and treaties before teaching them”.

Table 4. Graduates perception of the usefulness of the core values learned in the College.

Core Values	Mean	Interpretation
Integrity	4.40	Very Useful
Teamwork	4.31	Very Useful
Excellence	4.34	Very Useful
Social responsibility	4.5	Very Useful
Innovations	4.13	Useful
Patience	4.53	Very Useful
GRAND MEAN	**4.37**	**Very Useful**

Scale of Interpretation: 5.00-4.20 Very Useful; 4.19-3.40 Useful; 3.39-2.60 Somewhat Useful; 2.59-1.80 Seldom Useful; 1.79-1.00 Not at All useful

CONCLUSIONS

Based on the data gathered and values obtained during the statistical treatment of the data, the following conclusions are drawn:

1. The employment rate of the graduates of CTE is high. Most were employed as permanent teachers with eligibilities. Although, many are still unemployed, or are employed in a non-teaching position.
2. Graduates find all the skills they have learned in college useful. They find communication skills and teaching skills as their most useful skills learned in college.
3. The graduates perceive that the curricular content of the programs in the college are very useful. The importance of thesis writing to the graduates, though, can still be improved.
4. The overall core values learned in the college were found to be useful by the graduates.

RECOMMENDATIONS

The following are the recommendations promulgated based on the results of the study:

1. Periodic tracer studies should be done to determine the consistency of the usefulness of the skills, values, and curriculum content of the college's programs.
2. Strict monitoring of instruction quality, as well as improvement of program courses to better suit the changes in the work field.
3. Providing more opportunities for research, as well as the harnessing of competencies required of teachers.

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CONTEXTUALIZING CHILD LABOR: THE CASE OF CHILDREN INVOLVED IN TOBACCO FARMING IN SAN JOSE, OCCIDENTAL MINDORO

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ABSTRACT

This study highlights the nature of children's participation in tobacco farming and their school performance. The study employed the descriptive method. Data were gathered using the triangulation method comprising of household interview, key informant interview, and use of secondary data. A total of 249 children representing the randomly selected tobacco-farming households participated in the study. Results revealed children involved in tobacco farming are young, of different birth orders, and belonging to medium-sized households and low annual income-families. They have average GPAs and very high school attendance. They perform hazardous and heavy work. Age, household size, and school attendance were found significantly related to the children's nature of participation in tobacco farming. Considering the age and type of work the children perform, nature of participation in tobacco farming constitutes a "child labor." Despite the nature of their involvement in farm work, they still do well in school. This study nullifies the notion that children involved in child labor do not perform well in school. It is recommended that schools with students engaged in child labor may create special programs aimed at helping them cope with their studies or improve their academic performance. Concerned agencies may likewise educate parents on the kind of work their children is performing. They should be enlightened about some tasks that pose hazard on their children's health and studies.

Keywords***: participation, school performance, child labor.***

INTRODUCTION

Typical Filipino families are no different from other parents worldwide. Parents discipline and mould their children into socially accepted norms. Part of the norm is for children to participate early in the household activities. In farming communities, children are socialized to get involved in family's productive activities. Children especially from poor families contribute to family labor. Poor households often rely on the work performed by children in order to meet their immediate needs (FAO, 2015). However, children's involvement in productive work becomes problematic when it interferes with their physical, emotional and intellectual development (Phillip Morris International, 2008).

The concept of child labor is often defined as work that deprives children of their childhood, their potential and dignity, and that is harmful to their physical-mental development. It refers to work that is harmful to children and interferes with their schooling (Srivastava, 2011). Similarly, the FAO (2015) defines child labor as work that impairs the children's well-being or hinders their education, development, and future livelihoods.

The Childs Education International (2014) opined that poor families push their children to work out of necessity. This makes children miss long period or drop out of school. The Phillip Morris International (2008) reported that 16 per cent of Filipino children are engaged in economic activity and that participation of children in tobacco production is a common feature in tobacco growing regions.

The municipality of San Jose in Occidental Mindoro is a tobacco growing community. According to the National Tobacco Administration-San Jose (NTA-San Jose) in its 2014-2015 Report, San Jose has nine tobacco growing barangays. These are Barangays Bayotbot, Murtha, La Curva, Magbay, Camburay, Batasan, Monteclaro, and San Isidro. The NTA-San Jose Report indicated a total of 968 registered tobacco farmers in the municipality. The report, however, does not contain data about the farmers' profile. Furthermore, it does not have information as to involvement of family members particularly the children in tobacco farming. Hence, this study found it important to look into the children's participation in tobacco farming and assess the nature of work they perform. Furthermore, this also assessed the children's school performance in terms of their grade point average (GPA) and school attendance. This investigation intended to generate data for policy formulation that will eventually promote and protect the children's right and welfare. Similarly, the findings of the study can be used in designing community projects that will benefit tobacco farmers and their families especially the children.

OBJECTIVES

This study determined the children's nature of participation and their school performance. Specifically, this study aimed to:

1. Describe the socio-economic characteristics of the children in terms of:
   a.age;
   b.birth order;
   c.household size; and
   d.household annual income.
2. Ascertain the school performance of the children in terms of:
   a.Grade Point Average; and
   b.School attendance.
3. Find out the nature of children's participation in tobacco farming.
4. Determine the relationship between the children's socio-economic characteristics and their nature of participation in tobacco farming.
5. Discuss the relationship between the children's school performance and the nature of participation in tobacco farming.

METHODOLOGY

This study employed the descriptive research method. Data were gathered using the triangulation method comprising of household interview, key informant interview, and use of secondary data. A total of 249 children representing the randomly selected tobacco-farming households were the respondents of this study. They were the children who had at least attended school prior to data gathering (School Year 2016-17). Their ages ranged from 5 to 17, to qualify as children engaged in farm work according to FAO (2015).

The study utilized the two-stage sampling technique. In stage one, five barangays with the highest population of tobacco farmers from the nine tobacco farming barangays were purposely selected. In stage two, farming households from the five barangays were selected using the simple random procedure. Only one child who was willing to take part in the study in each randomly selected tobacco farming-household was considered to constitute the final set of respondents. Parents' consent was sought for the children's participation in the study. Data collected were analysed using the descriptive and inferential statistics. The frequency distribution and percentage were used. Pearson's Product Moment Correlation was used to test relationship between variables.

Table 1 shows the total tobacco farmer-households in the randomly selected barangays and sample size.

Table 1. Distribution of tobacco farmer households per barangay and sample size.

Barangay	No. of Tobacco Farmer-Households	Sample Size
Bayotbot	244	82
Murtha	170	57
La Curva	164	55
Magbay	111	37
Camburay	47	18
Total	**736**	**249**

FINDINGS

Socio-economic characteristics of the children involved in tobacco farming

The study looked into the socio-economic characteristics of the children involved in tobacco farming. This comprised age, birth order, household size, and household income.

Table 2 shows that more than half (58.63%) of the children were teenagers (13 years old and above) while 41.37% were even younger (12 years old and below). The children's ages qualify to ILO's (2002-2008) description of a child worker who is below 15 years of age engaged in any phases of tobacco farming, whether on full-time or part-time basis, and receiving remuneration in cash or in kind.

In terms of birth order, the study found that the respondents were diverse. Although about one-third were first born (31.32%) and almost the same number (29.71%) were second children, the result indicated that children were spread out in terms of birth order. This suggests that the farming-households involved all their children in tobacco farming.

With regards to household size, most (63.85%) of the children belong to medium-sized households. The respondents' household size is within the regional average at 4.5 for Region IV-B MIMAROPA (PSA, 2012), where the province of Occidental Mindoro belongs.

Table 2. Socio-economic characteristics of children involved in tobacco farming (N=249).

Socio-economic characteristics	Frequency	Percentage (%)
Age		
12 and below	103	41.37
13 and above	146	58.63
Birth order		
First	78	31.32
Second	74	29.71
Third	49	19.67
Fourth	25	10.04
Fifth	12	4.81
Sixth	6	2.40
Seventh and above	5	2.00
Household size		
Small (3 member and below	55	22.08
Medium (4 to 7 members)	159	63.85
Big (8 members and above)	90	14.05
Household annual income		
Low (below 179,00)	248	99.60
High (above 179,00)	1	0.40

The study found that almost all of the children's families had household annual income lower than the regional average at PhP 179,000. According to the Philippine Statistics Authority (2013, October 24), Filipino families in the poorest decile earn PhP 6,000 monthly, on average in 2012. This is based on the 2012 Family Income and Expenditure Survey. This implies that the children belong to poor households. The findings also suggest that children in poor household are really involved in farm work. The FAO (2015) reported that children especially in poor families contribute to family labor. Poor households often rely on the work performed by children in order to meet their immediate needs.

School performance of children involved in tobacco farming

This study likewise examined the school performance in terms of Grade Point Average (GPA) and school attendance of the children involved in tobacco farming. GPA refers to the average grade of children obtained during last school year they had attended prior to data collection. The GPA is obtained by multiplying the grade to the number of credits for each subject. The sum of grades divided by the total number of credits is the students' GPA. The GPAs are categorized and interpreted using the standard used by the Department of Education as follows: 90-100 (Very high), 85-89 (High); 80-84 (Average); 75-79 (Low); and 74-below (Very low).

School attendance refers to the number of days the pupils attended of the required total school days within the school years as indicated in the pupils' report card. Percentage of attendance is obtained by dividing the number of school days present with the total number of school days and then multiplied by 100. The percentage of school attendance is categorized as follows: 90-100% (Very high), 85-89% (High); 80-84% (Average); 75-79% (Low); and 74%-below (Very low). Table 3 shows the results.

Majority (95.18%) of the children involved in the study were enrolled at the time the study was conducted (July-September, 2016). Their school performance was based on the Form 138 (Report Card) in the last school year (2015-2016). More than half (58.23%) of the children were at Grades 7 to 10 levels. This result is consistent with the other finding that 58.63 (Table 2) of the children are teenagers.

Only 6.02% of the children were in Grades 11 or higher. This finding can be explained by the fact that number of children enrolled in these Grade levels is small because they were among the first group of students who took the K-12 program.

The study found that most (61.45%) children had an average grade of 80-84. They did fairly well in academics despite their involvement in farm work. Most of them (63.45%) had very high school attendance suggesting that poor Filipino families ensure that farm work does not hamper children's education.

Table 3. School performance of children involved in tobacco farming (N=249).

School Performance	Frequency	Percentage (%)
Education of children		
Presently enrolled		
Yes	237	95.18
No	12	4.81
Grade/Year of enrolled children		
Grades 1-6	77	30.92
Grades 7-10	145	58.23
Grades 11 and higher	15	6.02
Grade Point Average (last school year)		
Very High (90- 100)	3	1.20
High (85- 89)	63	25.30
Average (80- 84)	153	61.45
Low (75- 79)	29	11.65
Very low (74 and below)	1	0.40
School attendance		
Very high (90-100%)	158	63.45
High (85- 89%)	58	23.29
Average (80-84%)	25	10.04
Low (75- 79%)	8	3.21
Very Low (74% and below)	0	0.00

Nature of children's participation in tobacco farming

The nature of children's participation in tobacco farming in San Jose was assessed in terms of their age when they started involving in farm work, exposure to hazard, and number of hours/week doing farm work. Table 4 presents the results.

The findings showed that 75.90% of the children started working in the tobacco farm at 12 years old and below. The mean age is 11.09, suggesting that children are indeed involved in tobacco farming at a young age. The findings likewise showed that these children were exposed to hazards.

Table 4. Nature of children's participation in tobacco farming (N=249).

Nature of children's participation in tobacco farming	Frequency	Percentage
Age started working in tobacco farm		
12 and below	189	75.90
13 and above	60	24.10
Standard deviation: 2.18		Mean: 11.07
Exposure to hazard*		
Use sharp tools	234	93.98
Carry heavy loads/ objects	26	10.44
Pesticides exposure	5	2.00
Over exposure to sunlight	70	28.11
Injured/accident	1	0.40
Number of hours/week working in tobacco farm		
Light (14 hours and below)	89	35.74
Heavy (15 hours and above	160	64.26

Multiple response*

Majority (93.98%) of them used sharp tools which are considered hazardous. Similarly, most (64.26%) of the children were doing tobacco-related activities at least 15 hours a week. This suggests that children are highly involved in a heavy work. This also confirms the report of the Global March International (1998-2015) that children in the Philippines take part in all tobacco farm activities.

The FAO (2015) defined work as hazardous when children use sharp tools, carry heavy loads, experienced injury or accidents, are exposed to sun for long hours, or have gotten sick.

FAO opined that the children's involvement in any economic activities constitutes a child labor when they are between 5-17 years old; when the work they perform is hazardous and heavy; and when farm work affects their health and hampers their studies. FAO reiterated that only one of these indicators present can make the children's work a "child labor." Although children's participation in tobacco farming in San Jose did not affect their school performance, this study found their involvement a "child labor" because of their age and the nature work performed that was both hazardous and heavy.

Relationship between children's socio-economic characteristics and their nature of participation in tobacco farming

Table 5 presents the relationship between the children's socio-economic characteristics and their nature of participation in tobacco farming. The results revealed that the children's age and household size were significantly related to their nature of participation (computed r= 0.45> p-value = 0.00) and (computed r= 0.44> p-value = 0.00), respectively. The children's age establishes the nature of work they perform in tobacco farming. The finding that household size is related to nature of children's participation in tobacco farming can be explained by the fact that poor Filipino households view their members as steady source of free labor supply. Bigger households can make the work easier, cheaper, and faster.

The birth order and nature of participation in tobacco farming were found not significantly related (computed r= 0.04< p-value = 0.49). Similarly, household annual income was found not significantly related to their nature of participation in tobacco farming (computed r= 0.03< p-value = 0.62). These findings imply that children regardless of their birth order were involved in child labor. Similarly, these suggest that regardless of the amount the family generates annually, children are involved in tobacco farm work described as "child labor."

Table 5. Test of relationship between the children's socio-economic characteristics and their nature of participation in tobacco farming.

Children's socio-economic characteristics	Nature of participation in tobacco farming		Interpretation
	Computed r	p-value	
Age	0.45	0.00	Moderate relationship; significant
Birth order	0.04	0.49	No relationship; not significant
Household size	0.44	0.00	Moderate relationship; significant
Household income	0.03	0.62	No relationship; not significant

Relationship between children's school performance and their nature of participation in tobacco farming

Table 6 presents the relationship between the children's school performance and their nature of participation in tobacco farming. Result showed that the children's GPA was not significantly related to their nature of participation in tobacco farming (computed r= -0.02< p-value = 0.70). In contrast, school attendance was found significantly related to their nature of participation in tobacco farming (computed r= -0.24> p-value = 0.00).

Table 6. Test of relationship between the children's school performance and their nature of participation in tobacco farming.

Children's school performance	Nature of Participation in tobacco farming		Interpretation
	Computed r	p-value	
General Point Average	-0.02	0.70	No relationship; not significant
School attendance	-0.24	0.00	Negligible relationship; significant

CONCLUSIONS

In view of the above findings arrived at this investigation, the following conclusions are drawn:

1. The children from poor tobacco farming-households are engaged in a simple form of child labor.
2. Despite children's involvement in hazardous and heavy farm work, they still do well in school.
3. This study nullifies the conception that children involved in child labor do not perform well in school.

RECOMMENDATIONS

The proponents find the following recommendations necessary to minimize children's engagement in child labor and to further improve their school performance.

1. Benevolent development agencies may create livelihood options for poor tobacco households to augment family income and thereby minimize the number of children thrown into child labor.
2. Concerned schools may develop special programs for their students involved in child labor to help them cope with their studies or improve academic performance.
3. The parents need to be educated on the kind of farm work their children is performing. They should be enlightened about tasks that pose hazard on children's health and studies.
4. Similar sociological studies may be done to contribute to building new concepts and theories explaining incidence of child labor.

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LOWLAND RICE-BASED FARMERS' AWARENESS AND ADOPTION LEVELSTO ORGANIC AGRICULTURE IN OCCIDENTAL MINDORO, PHILIPPINES

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ABSTRACT

This study aimed to assess the lowland rice-based farmers' awareness and adoption levels to organic agriculture in Occidental Mindoro, Philippines. Specifically, this study aimed to characterize the lowland rice-based farmers, determine their awareness and adoption levels in organic agriculture, and determine their problems encountered in adopting organic agriculture. It was conducted in the municipalities of Magsaysay, San Jose and Sablayan, Occidental Mindoro from June 2016 up to March 2017. This study employed descriptive method of research utilizing pre-constructed questionnaire administered to 133 farmer-respondents in an interview schedule. Key informant interviews, focus group discussion and observation were also utilized to gather data. Descriptive statistics were used to present the organized and analyzed data. Results showed that lowland rice-based farmers are old, predominantly male and literate. They have an average household size, with long farming experience, in general but with short engagement to organic farming practices. Farmers are owners of farm land and affiliated to organizations, and had availed credit. They have high awareness on organic agriculture, particularly what seeds, fertilizer, and pesticide to use, as well as in organic fertilizer and organic pesticide production, but moderate level of awareness on organic marketing practices. They have moderate adoption of organic agriculture, particularly the choice of crops to use, crop rotation and soil management practices, commercial production of organic fertilizer, pests, diseases and weed management, growth regulators, pollution control, and soil and water conservation, but they have high adoption to fertilization policy but with very low adoption to diversity in crop production. Indifferent price level of product, lack of market outlet and difficult and very expensive certification process are among the common problems encountered by the lowland-rice farmers. Among the recommendations are: (1) strengthen the market chain of lowland organic rice to link the farmer-producers to the consumers and other market prospects, (2) provision of technical and financial assistance for the farmers to encourage and support them in the conversion and eventually, certification process, (3) intensify government's advocacy to further increase the number of farmer-adopters, and (4) invest in research and development programs to further formulate organic inputs that would be more available and accessible to the farmers.

Keywords*: adoption; awareness; lowland rice; Occidental Mindoro*

INTRODUCTION

Agriculture remains an integral part of inclusive development as it is 2-4 times more effective in poverty reduction compared to other sectors of the economy About 65 percent of the poorest population is employed in the agriculture sector and is currently contributing to about one-thirds of the gross domestic product of developing countries (Asian Development Bank, 2015).In the Philippines, agriculture still plays a very significant role in the country's economy (Ponce, 2004). GDP from agriculture sector for the second quarter of 2016 amounted to ₱135 million (Trading Economics, no date) employing 33 percent of the country's labor force (Cabigas&Moralla (2011) as cited in The National Organic Agriculture Program).

One of the major agricultural commodities in the Philippines is rice. As stated by Department of Agriculture (DA) (Gumapac, 2011), rice is a food staple – an economic commodity. It is both a major expenditure item and a source of income for many Filipino households. Yet, the current practices or conventional practices in agriculture are causing numerous problems such as soil and water pollution, greenhouse gas emissions, and biodiversity reduction (ADB, 2015). Food safety is also becoming an issue in agriculture, along with food security.

Based on the International Federation of Organic Agriculture Movement (IFOAM) (2016), 2015 was a fair good year for organic farming. Organic production and domestic markets have established themselves throughout the Asian region; however, domestic organic sectors may be small in some areas, governments are still encouraging and supporting organic agriculture. Furthermore, IFOAM emphasized that the main reason for the growing demand for organic products is food safety, starting from production, to processing and even in transportation of products.

The signing of Republic Act No. 10068, otherwise known as the Philippine Organic Agriculture Act on April 06, 2010 paved the way for intensification and promulgation of organic agriculture in the country. According to National Organic Agriculture Program (NOAP) 2012-2016 and Alfon and Redoña (no date), organic agriculture in the Philippines is still in infancy and formative years. There is also an increasing trend in organic agriculture from 2011 to 2016 with 8,980 farmer-practitioners and 14,140 hectares (NOAP) to 116,558 organic farmer-practitioners and 343,387 hectares of organic farm lands (Department of Agriculture, 2016). The production also increased from 12,988 mt to 442,510 mt in a span of four years (2011-2015). Most common organic agricultural products include well-milled white rice and semi-polished red and brown rice, vegetables, fruits, herbs and spices, as well as some livestock and poultry.

Organic products are being sold mainly in specialty stores and weekend markets in Metro Manila. Based on 2000 data from the US Department of Agricultre (USDA), the local organic product market is estimated to be worth USD 6.2 million or PhP 266.7 million, while Philippine Development Assistance Program (PDAP) estimated local organic products to be worth between USD 20 million orPhP 860 million to USD 30 million of PhP 1.3 billion. Currently, organic agriculture products are slowly getting through the shelves of large supermarket chains and restaurants due to the increasing demand brought about by growing number of health conscious individuals wanting healthier and more nutritious food products.

With the growing concerns, organic agriculture was seen not just in the Philippines, but worldwide as a solution to the abovementioned problems (Philippine Council for Agriculture and Aquatic Resources Research and Development Training Module No. 412012, 2012). However, due to documented problems in organic agriculture certification, farmers still opted to adopt more environment-friendly and ecologically-sound agricultural practices.

OBJECTIVES

This study aimed to assess ecologically-sound lowland rice-based farming system in selected municipalities of Occidental Mindoro. Specifically, this study aimed to:

1. Characterize the lowland rice-based farmers adopting ecologically-sound farming practices in selected municipalities of Occidental Mindoro.
2. Determine the awareness level in organic agriculture of lowland rice-based farmers adopting ecologically-sound farming practices in selected municipalities of Occidental Mindoro.
3. Determine the adoption level in organic agriculture of lowland rice-based farmers adopting ecologically-sound farming practices in selected municipalities of Occidental Mindoro.
4. Determine the problems encountered of lowland rice-based farmers adopting ecologically-sound farming practices in organic agriculture.

METHODOLOGY

This study employed descriptive method of research in assessing the ecologically-sound lowland rice-based farming system in selected municipalities of Occidental Mindoro, particularly the characteristics of the farmers, their awareness and adoption level to organic agriculture, as well as the productivity and profitability of ecologically-sound lowland rice-based farms and conventional farms. This study also determined the problems encountered of farmers in adopting organic agriculture and finally, the sustainability of organic agriculture in the Province of Occidental Mindoro.

It utilized both primary and secondary sources. Primary sources of data and information included interviews from the farmers, agricultural technicians, Municipal Agriculture Officers, barangay officials and officers of various cooperatives. Secondary sources were books, journals, articles and data from internet sources.

The primary respondents for this study were the lowland rice-based farmers employing ecologically sound farming practices in the municipalities of Sablayan, San Jose and Magsaysay. Only those farmers who have been adopting ecologically sound farming practices, not necessarily certified organic practitioners, for three years were interviewed for this study. The main crop of the farmer should be lowland rice. A list of farmers employing ecologically sound agricultural practices was secured from the Office of the Provincial Agriculturist. Barangay officials, officers of various associations/organizations, and MAO personnel in the selected areas were also interviewed for the triangulation method.

For this study, stratified random sampling was employed. The three purposively selected municipalities of Magsaysay, San Jose and Sablayan served as the strata of this study. According to the data from the Office of the Provincial Agriculturist, these municipalities have the largest area allotted for ecologically-sound farming practices. List of farmers practicing ecologically-sound agriculture was requested from respective municipalities. Since the population of three municipalities did not exceed 500, 35 percent from each strata was determined as the sample size. Next step was the simple random sampling of lowland rice farmers among the three municipalities. A total of 133 lowland rice farmers were interviewed for this study.

Descriptive statistics, such as frequency, weighted mean, average, range and percentage distributionwas used for this study.

FINDINGS

Profile of Lowland-Rice Based Farmers

Table 1 presents the characteristics of lowland rice-based organic farmers in Occidental Mindoro. It shows that the mean age of farmers is approximately 50 years old. Older people are engaged in farming, particularly organic farming. As for the distribution of the respondents based on sex, 73.68 percent are male, while 26.32 percent are female. Organic farming in Occidental Mindoro is also dominated by male as they are expected to perform farming duties for the family. However, a considerable percentage of female is also involved in organic farming. This was supported by the study of Truc et al. (2012) and Yamota and Tan-Cruz (2007). It can also be gleaned from the table that the farmers have basic numeracy and reading skills as majority were able to attend formal schooling. This affects their decision-making for their farms.

Table 1. Profile of lowland-rice based farmers adopting ecologically-sound farming practices in selected municipalities of Occidental Mindoro

CHARACTERISTICS	FREQUENCY (N=133)	PERCENTAGE
Age		
20-30	8	6
31-40	8	6
41-50	67	50
51-60	30	23
61-70	16	12
71-80	4	3
Mean: 50.34 years old		
Range: 27-77 years old		
SD: 12.27		
Sex		
Male	98	74
Female	35	26
Educational Attainment		
Elementary undergraduate	1	1
Elementary graduate	20	15
High school undergraduate	49	37
High school graduate	38	29
College undergraduate	9	7
College graduate	15	11
Others (Vocational courses)	1	1
Household size		
2 and below	24	18
3-5	75	56
6-8	23	17
9 and above	11	8
Mean: 4.83		
Range: 1 - 10		
SD: 1.84		
Farming experience		
10 and below	16	12
11-20	32	24
21-30	62	47
31-40	15	11
40 and above	8	6
Mean: 23.59		
Range: 3 - 49		
SD: 13.20		
Years adopting Ecologically Sound Farming Practices		
1-3	70	53
4-6	40	30
7-9	16	12
10 and above	7	5
Mean: 4.78		
Range: 1 - 10		
SD: 3.05		
Land tenure status		
Owner	89	67
Tenant	44	33
Credit Availment		
Yes	117	86
No	18	14
Organizational Affiliation		
Affiliated	133	100

Farmer's average household size is approximately five members. In a traditional Filipino farming family, family members also assist in the farm works, instead of hiring farm laborers. They have also long farming experience, averaging to 23.59 years, but short organic farming experience, averaging only to 4.78 years. Many (66.92%) of the organic rice farmers own the land that they are cultivating while 33.08 percent are renting. Most (87.97%) of the organic farmers availed credit to supplement the capital required of their farming activity. Among the sources of credit of the farmers are cooperatives, formal lending institutions and relatives. All of the respondents are affiliated to various organizations such as cooperatives, farmers' and irrigator's associations. They are also members of OrganicoMindoreños, an organization established for easier mobilization of organic agriculture initiatives for the province of Occidental Mindoro. Their affiliation also makes information accessible for the farmers.

Awareness of Lowland Rice-Based Farmers on Organic Agriculture

Table 2 shows the awareness of lowland rice-based farmers adopting ecologically-sound farming practices on organic agriculture in Occidental Mindoro. It can be seen from the table that the farmers have high level of awareness on organic agriculture, particularly on what seeds, fertilizer and pesticide to use as well as in organic fertilizer and organic pesticide production, but farmers have moderate level of awareness on marketing practices of organic rice.

According to Brown, Rosario and Aganon (2015), organic farming is not just merely application of organic inputs. It is a technical process which involves complexities starting from preparation of inputs at own farms up to following the proper procedures in marketing organically produced products. These standards should be maintained to ensure the quality and integrity of the products which is one of the main concerns of organic agriculture. Farmers are knowledgeable about the technical aspect of organic agriculture. However, they encounter challenges in marketing their product, since *palay*grown from ecologically -sound practices are undifferentiated, in terms of price, from *palay*grown from conventional farming. This is also the reason why farmers are only moderately aware in the marketing practices of organic agriculture. They tend to disregard or ignore proper and appropriate practices before of product indifference.

Table 2. Awareness level of lowland rice-based farmers adopting ecologically-sound farming practices on organic agriculture in selected municipalities of Occidental Mindoro.

ASPECTS OF ORGANIC AGRICULTURE	WEIGHTED MEAN	INTERPRETATION
Seeds to use	2.75	High
Fertilizer to use	2.7	High
Pesticide to use	2.77	High
Organic fertilizer production	2.47	High
Organic pesticide production	2.35	High
Marketing practices	2.22	Moderate
Overall Weighted Mean	**2.54**	**High**

Adoption of Lowland Rice-Based Farmers in Organic Agriculture

Table 3 presents the adoption level of organic rice-based farmers on organic agriculture in Occidental Mindoro. It shows a moderate level of adoption of farmers to organic agriculture with an overall weighted mean of 2.98. Farmers have very low level of adoption (weighted mean = 1.71) in diversity in crop production but have moderate level of adoption in the choice of crops to use (weighted mean = 2.62), crop rotation and soil management practices (weighted mean = 2.79), commercial production of organic fertilizer (weighted mean = 2.7), pests, diseases and weed management (weighted mean = 2.86), growth regulators(weighted mean = 3.82), pollution control (weighted mean = 3.3) and soil and water conservation (weighted mean = 3.4). On the other hand, farmers have high level of adoption in fertilization policy (weighted mean = 3.66).

Table 3. Summary of adoption level of lowland rice-based farmers adopting ecologically-sound farming practices in selected municipalities of Occidental Mindoro in various areas of organic agriculture.

AREAS OF ADOPTION	WEIGHTED MEAN	INTERPRE-TATION
Choice of crops to use	2.62	Moderate
Crop rotation and soil management practices	2.79	Moderate
Fertilization policy	3.66	High
Commercial production of organic fertilizer	2.7	Moderate
Pests, diseases and weed management	2.86	Moderate
Growth regulators	3.82	Moderate
Pollution control	3.3	Moderate
Soil and water conservation	3.4	Moderate
Diversity in crop production	1.71	Very Low
Overall Weighted Mean	**2.98**	**Moderate**

Problems encountered

Table 4 shows the different problems encountered of lowland rice-based organic farmers in adopting organic agriculture in Occidental Mindoro. It shows that among their top five problems encountered are indifferent price level (69.92%) for organic and conventionally grown products, lack of market outlet (66.92%), difficult and expensive certification process (63.91%), insensitivity of nearby farms (51.13%), and insufficient supply/unavailability of organic inputs (50.38%).

Table 4. Problems encountered of lowland rice-based organic farmers of Occidental Mindoro in adopting organic agriculture.

PROBLEMS ENCOUNTERED*	FREQUENCY (n=133)	PERCENTAGE
Insufficient supply/ unavailability of organic inputs	67	50.38%
Decline yield/production	45	33.83%
Presence of weeds and pests	34	25.56%
Lack of market outlet	89	66.92%
Indifferent price level	93	69.92%
Laborious preparation	41	30.83%
Unavailability of raw materials for organic input preparation	26	19.55%
Delayed irrigation	25	18.80%
Insensitivity of nearby farms	68	51.13%
Difficult and expensive certification process	85	63.91%
Increasing cost of organic input preparation	48	36.09%

*multiple response

Studies suggest that organically grown products command a higher price in the market if they are certified and labelled as organically produce. Since, lowland rice-based farms of Occidental Mindoro is not yet certified to be 100% organic, they cannot expect that their output can be bought at higher price. Consumers pay for the integrity and quality of the products that they are buying. Furthermore, since their products is not yet certified, they are having difficulty in finding a niche market where they could take advantage of even a small increment in the price of their produce. Though the farmers have stable buyers of rice such as NFA and private traders, their adopted production practices were not considered at all in pricing their product.

One of the major challenges faced by small farmers converting to organic agriculture is the certification process. Farmers found it very expensive and difficult to comply with. Even though they are aware that only upon the certification of their farms can they take advantage of the economic benefits of organic agriculture, they cannot afford the expenses and the tedious process of certification. They also face problems with the insensitivity of nearby farms or those that are non-organic practitioners or conventional farmers. While the farmers exert much effort in adopting ecologically-sound farming practices and complying with the requirements and standards of the organic agriculture, they found it useless if their nearby or adjacent farms are still into conventional farming.

Also, because of the increasing popularity of organic agriculture, and even though farmers are capable of producing their own organic farm inputs, there have been cases that famers experience shortage of organic inputs such as vermicompost.

In a study conducted by Benabise and Banciles (2012), farmers in Cagayan Valley experienced problems in adopting organic agriculture such as slow effect of organic fertilizer, labor-intensive, source of manure, cost of organic fertilizer, storage of manure, emergence of weeds, and unfavorable smell of most organic fertilizers. Some of the mentioned problems were also experienced by farmers in selected municipalities in Occidental Mindoro.

CONCLUSIONS

This study has the following conclusions:

1. Organic rice farmers are old, predominantly male and literate. They have an average household size, with long farming experience, in general but with short engagement to organic farming practices. Farmers are owners of farm land and affiliated to organizations, and had availed credit.
2. Organic rice farmers have high awareness on organic agriculture, particularly what seeds, fertilizer, and pesticide to use, as well as in organic fertilizer and organic pesticide production, but moderate level of awareness on organic marketing practices.
3. Organic rice farmers have moderate adoption of organic agriculture, particularly the choice of crops to use, crop rotation and soil management practices, commercial production of organic fertilizer, pests, diseases and weed management, growth regulators, pollution control, and soil and water conservation, but they have high adoption to fertilization policy but with very low adoption to diversity in crop production.
4. The most common problems encountered of lowland organic rice farmers are in production, certification and marketing aspects of organic agriculture.

RECOMMENDATIONS

With the foregoing results and conclusions, this study recommends the following:

1. Strengthen the market chain of lowland organic rice to link the farmer-producers to the consumers and other market prospects.
2. Provision of technical and financial assistance for the farmers to encourage and support them in the conversion and eventually, certification process.
3. Intensify government's advocacy to further increase the number of farmer-adopters.
4. Invest in research and development programs to further formulate organic inputs that would be more available and accessible to the farmers.

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