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Phone: (6382) 224-1481 local 1326/ 1327 Fax: (6382) 226-4461
Email: madayawjournal@spcdavao.edu.ph
Website: www.spcdavao.edu.ph

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PREFACE

The *Madayaw* Journal is an academic journal that compiles research articles of faculty and students of San Pedro College (SPC) and other researchers outside of the College who are interested in having their papers published in this journal. A multidisciplinary refereed journal that contains topics across disciplines, the *Madayaw* Journal is responsible for disseminating knowledge as an output of student and faculty researches in their respective programs and enhances the linkages among academic institutions and some organizations in the region.

Likewise, SPC annually holds the *Madayaw* International Multidisciplinary Research Conference. The conference aims to enable researchers to discuss, share and expand boundaries of knowledge and research interest by providing among various disciplines an avenue to share ideas, learn the current trends, and forge partnerships and collaborative agreements between and among themselves. The *Madayaw* Journal shall also compile submitted studies presented during the said conference, as well.

From a Dabawnon word that means anything good, beautiful, and/ or pleasant, the *Madayaw* Journal publishes articles that went through the process of double-blind review. Through the editorial board, this volume invited reviewers who are competent in their respective disciplines to ensure that the journal conforms to publication policies and standards.

May this journal continue to advance more research and sustain the culture of sharing and promoting research and publication relevant across disciplines.

FOREWORD

Welcome to the 3rd issue of *Madayaw* Multidisciplinary Journal of San Pedro College!

The *Madayaw* Journal has maintained its original purpose by serving as a platform for dissemination of research studies of various fields. For this issue, we have included papers from the Guidance and Counseling, Industrial Counseling, and Hospital Administration for every reader to enjoy.

This issue has also gone through some form of evolution manifested by inclusion of the Madayaw's official logo in our cover page. Our pool of reviewers have grown as well with new reviewers coming from esteemed universities joining us for this current volume. Moving forward, we hope to include more studies from other fields, and to receive more submissions.

We extend our sincere thanks to all article reviewers, and the editorial board for their overwhelming support and assistance to make this current issue possible. We are also grateful to the readers of the journal's past volumes.

We hope that you will take delight in every article of *Madayaw's* latest issue, and continue to support its future volumes.

Elsa May Delima-Baron
Editor-in-Chief

ADOLESCENTS' SELF-STRUCTURES, MATH ACHIEVEMENT GOALS AND LEARNING STRATEGIES

Rosita R. Relatado, MAGC

This study determined the relationship between adolescents' self-structures (self-complexity, self-construal and adolescent emotion), math achievement goal approaches (mastery, performance, and work avoidance) and learning strategies (critical thinking and metacognition). A total of 190 third and fourth-year high school students participated in the study which employed universal sampling. The descriptive correlation approach was employed to determine relationship of the variables. Results showed no significant relationship between the students' self-structures and math achievement goals as well as self- structures and learning strategies. No significant relationship existed between math achievement goal approaches and learning strategies. However, it was interesting to note that a particular component of the two variables, self-identity (adolescent emotion) was positively correlated with mastery approach (math achievement goal) with a Pearson correlation coefficient of r = 0.155. Furthermore, self-devaluation (adolescent emotion) was negatively correlated with critical thinking (learning strategies) with an r = -0.166. It could be inferred that self structures of an adolescent did not correlate with cultivating math achievement goals to perform an academic task as well as in the application of learning strategies to attain such goals.

Introduction

The democratic ideals of the 21st century predispose the self to varied role models further accentuated by the strength of media appeal. Movies, television shows, rock videos, and magazine articles peddle the importance of outward appearance and dress, among others, glamorizing the role models one should emulate among movie stars, sports heroes, fashion models and the like. They are shown a kaleidoscope of role models, adolescents become perplexed, self-conscious, and insecure about their bodies and innate abilities. The "self" and its erratic changes have become the obsession of modern society. Knowing and nurturing the self has become a central concern and the stimulus for an outpouring of new theories, therapies, and researches in the fields of cognitive, behavioral, social psychology as well as other disciplines in the social sciences and humanities. Developmental and social-cognitive models of the self posit that cognitive development precipitates changes in self-content and structure making the self abstract, multidimensional, differentiated and integrated as well as relational and situation bound in content (as cited in Peña-Alampay, 2003). Parallel to self-development and reorganization of self is the onset of self-relevant thoughts among adolescents. Markus, Cross, and Wurf (1990) stressed the importance of self-relevant thoughts in motivation, anxiety, and performance in academic achievement. In this study, the features of the Filipino adolescent self that the researcher explored were: self-complexity, which refers to the number and degree of differentiation among self-aspect; self-construal, which refers to how others conceive the self; and adolescent emotion, the extent of identity confusion, emotional extremity and lability, self-anxiety and self-devaluation. The present study builds on prior researches of Bernardo (2003) that examined the Filipino adolescents' perceptions and beliefs on the values of education and its relationship to achievement goal and learning strategies; and Peña-Alampay's (2003) characterization of Filipino self in the aspects of self-complexity, self-construal, and negative emotions.

Intrigued by what is really in the "self" that contributes to the motivation of an individual to do something, the researcher determined to find out the significant relationship of this aspect to achievement goal and attitude of an individual in performing academic activities and the use of learning strategies which are applied to attain a learning goal.

As an educator, the researcher wondered why some students seem to work harder in their studies than others. Why do some students do the required readings, while others never open the textbook? Why do some students use superficial learning strategies, such as note memorization, while others use more sophisticated strategies such as elaboration? The answers to these questions seem to have a great deal to do with student motivation. It was also observed that students' attitudes towards studies particularly in mathematics are very expensive, exhibiting almost no motivation to study, thus, their low math performance. This particular observation is validated by the performance report on their math diagnostic test and in their College Scholastic Achievement Test (CSAT) which showed that math is one of the weakness of most of the students, particularly in the junior and senior high school students of a college (Imam, Mastura, and Jamil, 2013; Librando Jr., 2015).

With the framework, results of prior researches and observation as the backdrop, the present study embarked on an investigation of the relationship of self-structures (self-complexity, self-construal, and adolescent emotions) to Math achievement goals (performance approach, mastery approach, and work avoidance) and the use of learning strategies (critical thinking and metacognition).

Theoretical/Conceptual Framework

This study was anchored on social-cognitive, developmental, cultural, and socio-cultural theories concerning self-structures construct. Drawing from widespread developmental research, self-descriptions' content changes over time from concrete physical or behavioral characteristics to a statement of abilities and preferences to more abstract attitudes, emotions, and inner thoughts. How the self-structure affect achievement behavior of an individual was described by achievement goal theory, an important learning variable that was significantly associated with learning and academic achievement.

Achievement goal theory was defined as the integrated pattern of beliefs, attributions and affect that produces the intentions of behavior and that was represented by different ways of approaching, engaging in and responding to achievement type activities. Similarly, this theory posited that individuals aiming for success was associated with different outcomes or goals, such as mastery-approach, performance-approach, and work-avoidance (Urdan, 2004). The mastery approach represented a desire to develop competence, improve skills and understand concepts. The performance approach reflected a concern with demonstrating competence and is often defined in social-comparative terms. The individual strived to demonstrate competence by outperforming others. Work-avoidance represented the goal of avoiding appearing incompetent or less competent than others.

The present study examined self-structures (self-complexity, self-construal, and adolescent emotions) and their relationship to achievement goals (performance-approach, mastery-approach, and work-avoidance) and the use of learning strategies (critical thinking and metacognition) of the third- and fourth-year high school students of a college. The dependent variables were achievement goals (performance-approach, mastery-approach, and work-avoidance) and learning strategies (critical thinking and metacognition). The independent variables were the aspects of self-structures (self-complexity, self-construal, and adolescent emotions). Figure 1 showed the interplay of the variables of the study. Figure 2 showed the full path models indicating the relationship between the variables. Path analysis as an extension of multiple correlation model, expresses the same relationship by a set of regression equations, with each variable expressed as a linear function of the preceding variable (Yaremco, Harari, Harrison, & Lynn, 1982).

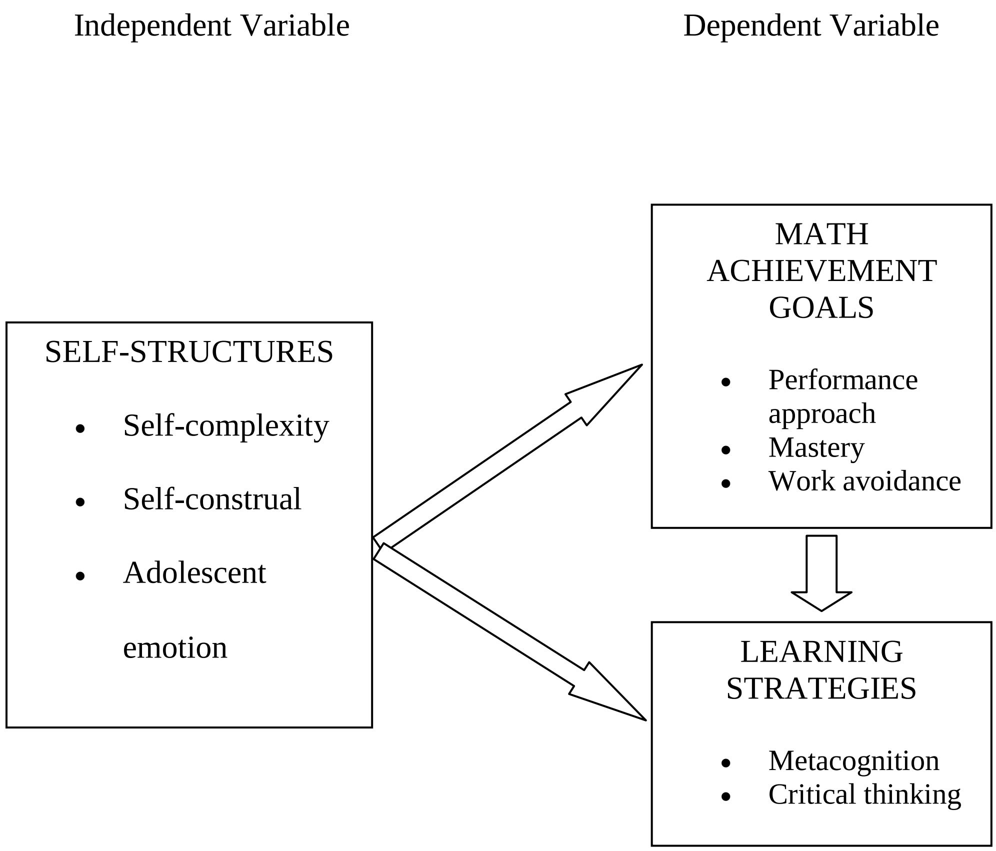
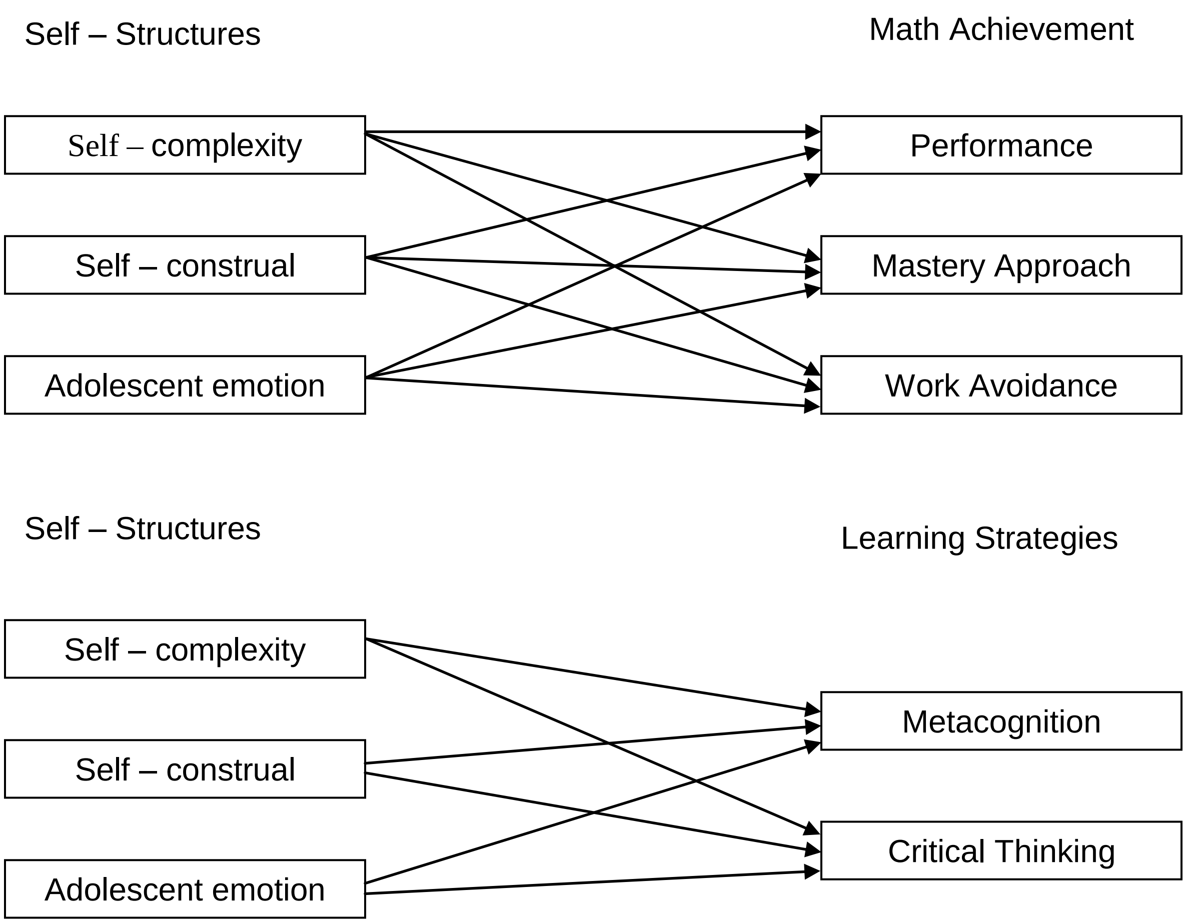


Figure 1. Theoretical/Conceptual Framework



Method

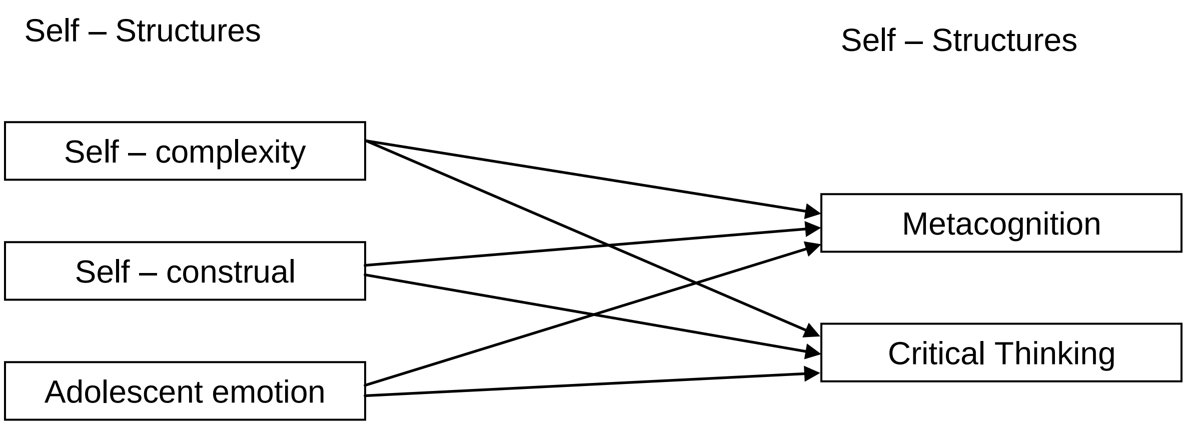


Figure 2. Full Path Analysis model indicating the relationship between self-structures, math achievement goals, and learning strategies

Methods

This study was a descriptive correlational examination of self-structures (self-complexity, self-construal, and adolescent's emotion) and its relationship to math achievement goals (performance approach, mastery-approach, and work avoidance) as well as learning strategies (critical thinking and meta-cognition). Path analyses were done exploring the relationship between self-structures, achievement goals and learning strategies of adolescent students. The study was conducted in a private Catholic college that is composed of 3 departments: post graduate, college, and basic education. There were 190 participants composed of third- and fourth-year high school students. Universal sampling technique was used. Table 1 shows the distribution of the participants by year level.

Table 1. Summary Distribution of the Participants of the Study.

Year level	Population
3rd year	93 students
4th year	97 students
Total no. of respondents	190 students

There were five sets of questionnaires used: 3 for self-structures, 1 for math achievement goal and 1 for learning strategies. Questionnaires for self-structures are Self-Complexity Task, Self-Construal Scale and Adolescents Emotional Scale, which are modified tests made by Peña-Alampay (2003). The tool was originally written in English and was translated into the Filipino language, pre-tested and item analyzed to establish reliability.

The Self-Complexity score, which was a function of both the number of groups formed by the participant and the degree of independence among groups, was determined by calculating the *H* statistic, which was interpreted as the minimal number of independent binary attributes needed to reproduce a trait sort. A higher *H* value was indicative of a larger number of groups (or self aspects) formed, and greater differentiation among the traits in these groups – hence greater complexity. The formula for *H* is:

$H = \log_2 n - (\Sigma\, n_1 \log_2 n_1)/n$

Where n is the total number of traits sorted (i.e., 33) and n_i is the number of traits that appear in a particular group combination.

Self-Construal, which referred to the constellation of cognitions, emotions, and behavior reflecting the individual's conception of the self, concerning and distinct from others had 2 components; the independent self construal which referred to the conception of the self as a bounded, unitary and stable entity that was composed of internal attributes and is separate from context. On the other hand, an independent self-construal referred to the conception of the self as part of the encompassing relationship.

On Adolescent Emotion, self and identity confusion (Identity), emotional extremity and lability (Emotionality), self-anxiety (Anxiety) and self-devaluation (Low self) were included. Conceptually, self and identity confusion pertained to the extent that the individual had knowledge and understanding about himself or herself, versus not knowing "the real me". Emotional extremity and lability referred to intensity, regulation, and fluctuation of felt emotions. Self-anxiety referred to self-consciousness and sensitivity to others' opinions about the self, while self-devaluation had to do with one's feelings of satisfaction and contentment of the self.

Students' responses in these instruments: self-construal and adolescent emotion, used a 5-point Likert scale, where 1 corresponded to *Hinding-hindi Totoo* and 5 to *Totoong-totoo*.

For students' academic or motivational goals, a scale that was used were 1 – Not at all true and 7 – as Very true. Five (5) items referred to mastery-approach, the desire to develop competence, improve skills and develop concepts; five (5) items for performance approach, which demonstrated competence by outperforming others; and five (5) items for work avoidance, which avoided being shown as incompetent or less competent than others. Pintrich, et al's questionnaire on Motivated Strategies for Learning, where

1 – corresponded to Strongly Disagree and 7 – as Strongly Agree (as cited in Bernardo, 2003) was adapted to determine learning strategies such as critical thinking, which involves logical thinking and reasoning, and metacognition, which dealt more on the process of self-assessment and self-correction.

Standard protocols for obtaining consent from the target participants were employed including securing pertinent permissions from the school administrator. The questionnaires were administered in respective classrooms, and participants were positioned apart from each other so that opportunities to talk or look at other's work were minimized and to facilitate participants' concentration and prevent them from being influenced by the behaviors of the other participants. The session started with the researcher's introduction about herself, and the purpose of the survey, to minimize performance anxiety, and social desirability effects. After the introduction, the Adolescent Emotion Scale (AE) was administered, and then the Self-Complexity Task (SC Task) followed with the Self-Construal Scale (SCS).

The Self-Complexity Task (SC Task) was administered between the other two questionnaires. This particular arrangement was intended to minimize anxiety by letting the participants answer first a relatively simple instrument before asking them to fulfill the more complex SC task. By placing the novel SC task between the two other scales, the level of interest and task engagement was also kept high. As the researcher collected the first questionnaire (A), each participant was handed one piece of bond paper lined with one-inch wide columns and a pack of 33 pieces 3x6 index cards, where the traits were printed in black marker pen. The standard instruction for the SC task was read orally by the researcher. Questions were entertained after giving the instructions. The participants were given 20 minutes to complete their traits sorts, with five-minute extension for those who did not finish on time. When everyone accomplished the SC Task, the third scale, Self-Construal Scale (SCS) was administered. A 20-minute break occurred before the administration of Motivated Strategies for Learning Questionnaire (MSLQ), and Math Achievement Goal Questionnaire.

Results and Discussions

The participants' Self-Complexity profile grouped by category was revealed in Table 2. As of social-relational roles, all participants perceived themselves as *"Bilang anak"* (100%) followed by the roles *"Bilang kaibigan"* (76%) and *"Bilang kapatid"* (45%). For social roles, 89 percent of the respondents exhibited *"Bilang estudyante"*, then *"Bilang kapitbahay"* (12%) and *"Bilang classmate"* (7%). The social roles of *"Bilang manliligaw/niliiligawan"* and *"Bilang leader"* (3%) garnered the least responses. To the situations presented in the self-complexity task, 23 percent responded: *"Kapag kasama ang mga kaibigan"* followed by *"Kapag nasa school"* (10%) and *"Kapag nasa bahay"* (8%). Only 2 percent answered "*kapag nakihalubilo sa iba",*which makes this situation is least demonstrated. The superordinate category exhibited *"Bilang ako"* (9%), as the highest, followed by *"Bilang isang mamamayang Pilipino"* (8%) and *"Bilang tao"* (7%). The lowest percentage belonged to the category *"Bilang anak ng Diyos"* (1%).

Table 2. Profile of the Self-Complexity of the respondents by category: Social Relational Roles, Social Roles, Situations, and Superordinate category (N=190).

Category	*f*	%
Social Relational Role		
Bilang Anak	190	100
Bilang kaibigan	145	76
Bilang kapatid	86	45
Bilang BF[a]/GF[b]	41	22
Bilang pinsan	27	14
Bilang Kuya/Ate	19	10
Bilang Apo	19	10
Bilang pamangkin	5	3
Social Roles		
Bilang estudyante	169	89
Bilang kapitbahay	29	12
Bilang classmate	14	7
Bilang manlalaro/dancer/musician	12	6
Bilang kausap	11	6
Bilang kaaway	8	4
Bilang bata/kalaro	7	4
Bilang leader	6	3
Bilang manliligaw/nililigawan	6	3
Situations		
Kapag kasama ang mga kaibigan	44	23
Kapag nasa school	19	10
Kapag nasa bahay	15	8
Kapag nasa loob ng simbahan	13	7
Kapag may exam/nagbabasa ng libro	10	5
Kapag kasama ang matatanda	10	5
Kapag namamasyal	10	5
Kapag may problema	8	4
Kapag wala sa mood/nagagalit	6	3
Kapag katabi/kausap ang crush	5	3
Kapag nakihalubilo sa crush	3	2
Superordinate Category		
Bilang ako	17	9
Bilang isang mamamayang Pilipino	16	8
Bilang tao	13	7
Bilang kristiyano	5	3
Bilang babae/lalake	4	2
Bilang anak ng Diyos	2	1

[a]-boyfriend; [b]-girlfriend

Table 3 reflected the participants' profile of self-complexity. Fifty-nine percent of the students obtained a score that is interpreted as high self-complexity. The lowest scores were obtained by less than one percent of the respondents.

Table 3.The Profile of the Participants' Self Complexity (N=190).

Self-Structure		**Scale and Verbal Description**				
		4.51-5.0 VH[a]	3.51.4.50 H[b]	2.51-3.50 M[c]	1.51-2.50 L[d]	1.0-1.51 VL[e]
Self-Complexity	*f*	8	112	52	17	1
	%	4	59	27	9	0.5

[a]*=very high;* [b]*=high;* [c]*=moderate;* [d]*=low;* [e]*=very low*

The participants' self-structure (self-construal-interdependence & independence, and adolescents' emotion, self-identity, emotional-lability, self-anxiety, & self-devaluation) was shown in Table 4. For the interdependence category of self-construal, most of the participants' responses were interpreted as *moderately true* (80%). On the other hand, no response was made for *slightly not true* and *not really true* descriptions. For the interdependence category, the responses are also interpreted as *moderately true* (61%), followed by *undecided* (34%) and *very true* (5%).

For self-identity, most of the students' responses can be described as *undecided* (51%) and *moderately true* (43%). For emotional lability, almost the same results were obtained: *undecided* (45%) and *moderately true* (50%). For self-anxiety, the respondents' scores were interpreted as *moderately true* (52%) and *undecided* (44%). The participants' self-devaluation can also be described as *moderately true* (44%) and *undecided* (52%). For all aspects of adolescent emotion, no one responded, *not really true*.

Table 4. The Profile of the Participants' Self-Structure (Self-Construal-Interdependence & Independence, and Adolescents' Emotion- Self-Identity, Emotional-Lability, Self-Anxiety, & Self-Devaluation) (N=190).

Self-Structure		***Scale and Verbal Description***				
		4.51-5.0 VT[a]	3.51.4.50 MT[b]	2.51-3.50 U[c]	1.51-2.50 SNT[d]	1.0-1.51 NRT[e]
Self-Construal	*f*	23	152	15	0	0
(Interdependence)	%	12	80	8	0	0
Self-Construal	*f*	9	116	65	0	0
(Independence)	%	5	61	34	0	0
Adolescents'	*f*	2	82	98	7	0
Emotion	%	1	43	51	4	0
(Self-Identity)						
Adolescents'	*f*	4	85	94	7	0
Emotion	%	2	45	50	4	0
(Emotional-lability)						
Adolescents'	*f*	7	97	84	2	0
Emotion	%	4	51	44	1	0
(Self-Anxiety)						
Adolescents'	*f*	5	84	98	3	0
Emotion	%	3	44	52	2	0
(Self-Devaluation)						

[a]*=very true;* [b]*=moderately true;* [c]*=undecided;* [d]*=slightly not true;* [e]*=not really true*

The profile of participants' Math achievement goal (performance approach, mastery approach, and work avoidance) was shown in Table 5. The highest percentage of responses in performance approach can be described as *moderately true* (40%). This was followed by *slightly true* (25%), *undecided* (17%), and *slightly not true* (5%). None answered *moderately not true* and *not at all true*.

For the mastery approach, most of the responses were described as *moderately true* (40%) followed by *slightly true* (27%) and *very true* (24%). Six percent were described as *undecided*, whereas *slightly not true* and *moderately not true* were responded by 2 percent of the respondents. No one responded *not at all true* for mastery approach. Most of the responses were described verbally as *moderately true* (37%) followed by *slightly true* (32%). The least number of responses corresponded to the *not at all true* category at 0.5 percent.

Table 5. The Profile of the Participants' Math Achievement Goal (Performance Approach, Mastery Approach, and Work Avoidance) (N=190).

Math Achievement Goal		***Scale and Verbal Description***						
		6.51-7.0 VT[a]	5.51-6.50 MT[b]	4.51-5.0 SNT[c]	3.51-4.50 U[d]	2.51-3.50 SNT[c]	1.51-2.50 MNT[e]	1.0-1.50 NAAT[f]
Performance Approach	*f*	23	77	48	33	9	0	0
	%	12	40	25	17	5	0	0
Mastery Approach	*f*	45	77	51	11	3	3	0
	%	24	41	27	6	2	2	0
Work Avoidance	*f*	27	70	60	26	4	2	1
	%	14	37	32	14	2	1	0.5

[a]=very true; [b]=moderately true; [c]= slightly not true; [d]=undecided; [e]=not really true; f=not at all true

The profile of the participants' learning strategies in terms of metacognition and critical thinking was presented in Table 6. For metacognition, forty-five percent of the participants' answers belonged to the *slightly agree* category, followed by *undecided* (28%) and *moderately agree* (20%). For critical thinking, the highest percentage of responses can be described verbally as *slightly agree* (40%) followed by *undecided* (29%) and *moderately agree* (22%). None responded to the *strongly disagree* category.

Table 6. The Profile of the Participants' Learning Strategies (Metacognition and Critical Thinking) (N=190).

Learning Strategy		***Scale and Verbal Description***						
		6.51-7.0 SA[a]	5.51-6.50 MA[b]	4.51-5.0 SA[c]	3.51-4.50 U[d]	2.51-3.50 SD[e]	1.51-2.50 MD[f]	1.0-1.50 SD[g]
Metacognition	*f*	1	37	85	54	9	4	0
	%	0.5	20	45	28	5	2	0
Critical Thinking	*f*	3	42	75	55	11	4	0
	%	2	22	40	29	6	2	0

[a]=strongly agree; [b]=moderately agree; [c]= slightly agree; [d]=undecided; [e]=slightly disagree; f=moderately disagree; g=strongly disagree

The mean score of the participants' self-structure (self-construal-interdependence & independence, and adolescents' emotion-self-identity, emotional-lability, self-anxiety, & self-devaluation) was presented in Table 7. Self-complexity was shown below with a verbal description of *high*. While self-construal under its two components; interdependence (4.08) and independence (3.7), both had a verbal interpretation of *moderately true*. On the other hand, adolescents' emotion under each component: self-identity (3.50), emotional lability & extremity (3.45), self-anxiety (3.79), and self-devaluation (3.43) were described verbally as *undecided*. The component on self-anxiety with a mean of 3.79 was described as *moderately true*.

Table 7. Mean Score Results of the Participants' Self-Structure (Self-Construal-Interdependence & Independence, and Adolescents' Emotion- Self-Identity, Emotional-Lability, Self-Anxiety, & Self-Devaluation) (N=190).

Self-Structure	Mean	Verbal Description
Self-Complexity	3.45	High
Self-Construal *Interdependence*	4.08	Moderately true
Self-Construal *Interdependence*	3.7	Moderately true
Adolescents' Emotion *Self-Identity*	3.50	Undecided
Adolescents' Emotion *Emotional Lability*	3.45	Undecided
Adolescents' Emotion *Self-Anxiety*	3.79	Moderately true
Adolescents' Emotion *Self-Devaluation*	3.43	Undecided

Using the Pearson's Product Moment Correlation coefficient *r*, results revealed that the *p* values were greater than the level of significance of 0.05, which implied that there is no significant relationship between the students' self-structures and performance approach. It is also noteworthy that although there was no significant relationship between self-structures and performance approach, the participants' scores exhibited a very low positive correlation for the association of performance approach to self-complexity, self-construal, self-identity, and emotional lability. A very low negative correlation was also found in the relation of performance approach, self-anxiety and self-devaluation. Interestingly, results showed a positive correlation between self-identity (adolescent emotion) and mastery approach (learning strategies). However, the participants' scores exhibited very low positive relationship for the variables under self-structures and mastery approach. Also, similar to performance approach, self-anxiety and self-devaluation were negatively correlated to mastery approach.

No significant relationship existed among the variables under self-structures and work avoidance because the *p* values obtained were greater than the level of significance of 0.05. Even if the relationship is not significant, a very low correlation was found between work avoidance and self-construal, both independent and interdependent and self-identity (adolescent emotion). A very low negative correlation between work avoidance and self-complexity, emotional lability, self-anxiety and self-devaluation was noted. No significant relationship between self-structures and math achievement goals were obtained.

Table 8. Test on Significance in the Relationship Between the Students' Self Structure (Self-Complexity, Self-Construal and Adolescent Emotion) and Math Achievement Goal (Performance Approach, Mastery Approach, Work Avoidance).

	Self-Structure						
	SC	SConI	SConIn	AES	AEE	AESA	AESD
MAG and PA							
***r* value**	.009	.132	.030	.105	.111	-.007	-.028
***p* value**	.009	.007	.679	.151	.129	.927	.706
MAG and MA							
***r* value**	.043	.06	.015	.155**	.032	-.016	-.039
***p* value**	.555	.345	.832	.032	.658	.832	.590
MAG and WA							
***r* value**	-.024	.137	.104	.067	-.003	-.041	-.056
***p* value**	.739	.059	.153	.356	.966	.570	.441

**MAG- Math Achievement Goal, PA- Performance Approach, MA- Mastery Approach, & WA- Work Avoidance*
**SC- Self Complexity; SConI- self-construal interdependent; SConIn- Self-Construal Independent; AES- Adolescents' Emotion Self- Identity; AEE – Adolescents' Emotional Lability; AESA- Adolescents' Emotion Self Anxiety; AESD- Adolescents' Emotion Self-Devaluation*
*** significant positive correlation*

Self-devaluation (adolescent emotion) exhibited significant relationship with critical thinking (learning strategies) with a correlation coefficient of r = 0.166 and p= 0.022, implying low negative correlation. The result showed no significant relationship between self-structures and metacognition given that their p values are greater than the level of significance. However, the scores demonstrate very low positive correlation between metacognition and self-complexity, self-construal, emotional lability, and self-anxiety. Negative correlation was also found among the variables: metacognition, self-identity, and self-devaluation (Table 9).

Table 9. Test on Significance in the Relationship between the Students' Self-Structure (Self-Complexity, Self-Construal, and Adolescent Emotion) and Learning Strategies (Critical Thinking and Metacognition).

	Self-Structure						
	SC	SConI	SConIn	AES	AEE	AESA	AESD
LS and CT							
***r* value**	.074	.126	.049	-.042	.019	.006	-.166**
***p* value**	.311	.084	.503	.564	.194	.939	.022
LS and M							
***r* value**	.088	.050	.067	-.072	.002	.041	-.084
***p* value**	.230	.489	.356	.324	.976	.578	.248

**LS-Learning Strategies, CT-Critical Thinking, and M-Metacognition*
**SC- Self Complexity; SConI- self-construal interdependent; SConIn- Self-Construal Independent; AES- Adolescents' Emotion Self- Identity; AEE – Adolescents' Emotional Lability; AESA- Adolescents' Emotion Self Anxiety; AESD- Adolescents' Emotion Self-Devaluation*
*** significant low negative correlation*

No significant relationship between Math achievement goals and learning strategies was documented (Table 10). Scores also demonstrate very low positive correlation for critical thinking and performance approach, mastery approach and work avoidance. A very low negative correlation was noted between metacognition and mastery approach and work avoidance.

Table 10. Test on Significance in the Relationship between the Students' Math Achievement Goal (Performance Approach, Mastery Approach, & Work Avoidance) and Learning Strategies (Critical Thinking and Metacognition).

	Math Achievement Goal		
	Performance Approach	Mastery Approach	Work Avoidance
LS[a]	CT[b]	CT	CT
***r* value**	.011	.039	.070
***p* value**	.877	.589	.338
LS	M[c]	M	M
***r* value**	.002	-.006	-.036
***p* value**	.981	.929	.621

[a] *=LS-Learning Strategies;*[b]*= Critical Thinking;* [c]*= Metacognition*

Participants in this study generally showed high self-complexity and were described as multifaceted, including categories of roles, relationships, situations, and attributes; hierarchical, with self aspects being organized according to super-ordinate categories; and integrated, in that seemingly contradictory attributes which were included both across and within self-aspects.

The self-complexity task demonstrates the participants' descriptions of themselves. All students described themselves as son or daughter, which implies that being a son or daughter is the greatest social-relational role because they perceive themselves to play roles of being a son or daughter at home like *masunurin, maalalahanin, mapagmahal,* and the like. This is followed by the role of being a friend, which implies a high degree of social association among peers which are shown on the traits they exhibit such as *palabiro, masayahin, mabait* and the like. As to social roles, the highest percentage of responses goes to the perception of being a student, which means that these participants see themselves as performing the roles of being a student as *responsible, matalino, nakikinig, matiyaga* and the like, more than any other social roles such as being a neighbor or classmate. For situations, most students see themselves in *kapag kasama ang mga kaibigan as makuwento, masunurin, masayahin, palabiro,* and *makulit*. Hence, these high school students emphasized the company of friends and friendship as the most valuable situation for them. This was followed by *kapag nasa school*, which supports their performance of the role of a student like *nakikinig, palabiro, seryoso* and the like. Under the superordinate category, most of the respondents perceived *bilang ako,* implying that they value the self most, compared to other superordinate aspects like being a Filipino citizen, being human or being Christian, which obtained a very minimal percentage.

Categories of self aspects suggested increases in social experiences, relationships and roles attendant in the adolescent period may partly account for the increase in self-complexity. The self attributes and aspects among the respondents were more grounded on concrete relationships, roles and situations rather than on generalized abstractions.

In terms of self-construal, results indicate that the participants were more interdependent than independent, confirming that Filipino youth value good interpersonal relationships, collective goals, and social norms and values. This also means that the participants perceive themselves more in relational terms with members of groups such as family or clan rather than for individualistic purposes. These findings are consistent with the qualitative analysis of Enriquez (1994), who describes the Filipino self as fundamentally connected with others. It was notable, however, that the participants also endorsed to a moderate extent, independent attitudes and values such as self-assertion, achievement and an autonomous self. They most likely possess a well-formed sense of self that they are confident about; for instance, *hindi problema para sa akin at sumagot at magsalita sa harap ng klase; Gusto kong maging prangka at tapat sa mga bagong kakilala ko*. As Markus & Kitayama (1991) said, the major goals of the independent construal include expressing and enhancing the self, promoting personal goals and being direct in communication. This is also consistent with several frameworks positing an increasing argument between individualism and collectivism, especially with the pressures of globalization and modernization. Triandis (1989) noted that many cultures are neither one nor the other but maintain qualities of both. Likewise, individuals may possess cognitions about their personal and collective selves and may see themselves as both independent and interdependent, although differing in degrees. Such a bicultural self may be particularly adaptive in today's increasingly complex society, to which the youth may be most vulnerable.

As for adolescent emotions, the participants exhibited moderately varied responses to the four components. Self-anxiety was perceived to be moderately true, implying a moderately high extent of anxiety with what other people might see or think of themselves, being criticized or being rejected, like, *Madalas akong nag-aalala sa iniisip sa ibang tao sa akin; Nag-aalala ako na hindi magugustuhan ng ibang tao ang tunay kong pagkatao; Sumasama ang loob ko kapag may nampupuna sa akin*.

Meanwhile, insofar as identity confusion, emotional lability and extremity, and self-devaluation were concerned, the students were "undecided". This means that they experienced or are experiencing a degree of uncertainty of knowing and understanding themselves very well which usually results in an identity crisis. This is verified by Ericksons' psychosocial stages in which the adolescent period exhibits the formation of the self, a very crucial task (Orenstein and Lewis, 2020). As to emotional lability, the respondents demonstrate uncertainty in determining their emotional extremes such as feeling very happy and then very sad within a short period. This also reflects their uncertainty over control of feelings and emotions when confronted with unexpected events or situations like *madali akong mapasigaw, magdabog o maiyak sa sobrang galit o lungkot*. Uncertainty was also expressed by the participants in their responses for self-devaluation. This means that they are not satisfied with the value and quality of their personality, feelings: *pakiramdam ko marami akong pagkukulang; nalulungkot lang ako tuwing inisip ko ang aking sarili; naisip ko na sana ibang tao na lang ako* are some expressions of this uncertainty. This study was also undertaken to explore possible relationship between self-structures and two important learning variables: Math achievement goals and learning strategies, as well as the relationship between Math achievement goals and learning strategies. Tentative hypotheses were posed regarding the possible correlation among the variables and these were assessed using different scales.

Among the self-structures, and Math achievement goals investigated, it is only self- identity that was significantly related to the mastery approach. The correlation was positive such that greater self-identity was associated with a higher level of mastery. This result suggests that that a high level of knowledge and understanding about oneself allows the individual to seek opportunities to increase their competence and master new challenges, that the exercises of competence do much to maintain one's identity and brings pleasure because it validates his or her identity. As Bernardo (2003) said, someone who aims to acquire the highest competence in a domain of learning would employ the highest level of cognitive strategies for learning. These students who are more aware of themselves pursue mastery goals and concerned with developing their ability over time. They also tend to have more a positive attitude and possess a higher level of self-efficacy or belief in their ability to succeed in a given situation. Likewise, there was no significant relationship between Math achievement goals and metacognition. The desire of students to master the subject matter and perform well in the class is not associated with the metacognitive strategies employed to learn facts.

Conclusions and Recommendations

Despite a few significant relationships discovered among the variables, results of the current study are still relevant to schools as basis for creating programs to facilitate the development of the self. Likewise, guidance counselors and teachers can provide opportunities for the total development of the children and in dealing with the learners' individual differences that emerge across ages. Parents as stewards of children, can benefit by providing a conducive social environment for the development of sound self of the children, and by providing bases for understanding the conditions accelerating developmental changes during puberty. Being the source of physical, social, emotional, moral, and spiritual support, they can set examples for self-reliance and integrated growth. Finally, the learners will understand themselves better when they acquire knowledge about their self structures. This will help them develop motivational goals to do their academic tasks better. Based on the findings of the study, the following are recommended: future research should endeavor to meet the demands of self-development through the various stages of their lives especially from childhood to adolescence. Likewise, it is suggested to put more emphasis on the methodologies that look into the socio-cultural practices and beliefs that shape the Filipino adolescent self and their experiences.

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PIT CREW EMPLOYEE PERFORMANCE

Henry M. Yap, MAIC

The study determined the performance of pit crew employees among four gasoline stations in Davao City based on level of job performance in terms of customer orientation and selling skills. Customer orientation was determined in terms of customer relations and service orientation, while, selling skills was determined in terms of technical knowledge and salesmanship. The research was conducted in a non-contrived setting utilizing a descriptive-survey design. The study used forced enumeration as a sampling technique with 30 pit crew employees as participants. A researcher-made questionnaire validated by experts with an obtained reliability index of α=.937 was used. Results showed that customer orientation, service orientation and job performance rating among pit crew employees were high. *Specific performance indicators such as customer relationship, service orientation, technical knowledge and salesmanship were also* high. *Findings called for further trainings for pit crew employees especially on technical knowledge and customer relationship which were important aspects in increasing sales.*

Introduction

In retailing, customer-contact sales employees are the fundamental link operationalizing policy through their everyday interactions with customers. Salespeople often face the contradictory directives of generating sales revenue by closing sales and securing customer satisfaction (Oliver & Swan 1989). In addition, salespeople play an important role in developing mutually beneficial buyer-seller relationships (Crosby, Evans, & Cowles 1990). People are said to be the performers in an organization, hence, employee performance translates into organizational productivity that will eventually reap profitability.

Globally, gasoline station companies have been retooling and redirecting the job descriptions of gas station attendants. Companies were standardizing and rationalizing their work. For instance Esso Standard Italiana (Esso) and Italian General Oil Company (Agip) redefined gas station attendant in post-war Italy from a pure working class man to entrepreneur. They redefined the job of gas station attendant as someone who markets the products and the gas station attendant was known as shopkeepers and small businessmen (Bini, 2012). This change was brought about by the mass motorization in Italy and was accompanied by rapid growth of gasoline consumption.

In the Philippines, stiff competition in the gasoline station is evident in the big three players, namely, Shell, Petron, and Chevron and other independent players who are penetrating the market. The competition is evident in terms of promotions and offering value added services to the client. The competition also includes product innovation, discounting and consumer satisfaction.

Locally, as Davao City becomes more progressive and highly industrialized traffic flow becomes a problem as business establishments like gas refueling stations have grown in number. As this type of establishment increases in number, it hires personnel which serve and sell to the consumers. Gasoline stations are not exempted from this scenario. With the stiffness of business competition, job titles were renamed such that forecourt crews (commonly known as pump/gas boy or girl attendant) are now called pit crew. The change of job title comes along with the change in job responsibility which is to deliver their task on a higher level, and to serve the customers in an authentic and delightful manner. In order to gain this competitive advantage, gasoline stations pit crew employees are oriented to be passionate experts and maintain a positive energy. Furthermore, the responsibilities and accountabilities have been changed from being a transactional to relational. That is from doing mechanical task the new demand of their job is to serve the customers with human interaction. In addition, to ensure that pit crew employees deliver their task at it is, several assessment centers were devised to measure pit crew service authenticity. Although these measure the overall performance of the company these do not thoroughly measure the pit crew performance based on job description. Measuring performance not based on the job description results to unfair measurement of job performance. Thus the need for an appraisal tool based on the job description to ensure equity to every employee becomes imperative.

Currently, a service station in Davao City bases its performance evaluation of employees on third-party audit. The third-party survey was done randomly, once in every quarter hence there is a bias with the crew that is being evaluated in the absence of performance appraisal. Secondly, since the mystery motorist survey was only aimed at measuring consistency of delivering the entire station on a global landscape, this only measures a portion of the overall performance of employees. Although the survey was adopted for use for all stations nationwide, a local standard for measuring employee (pit crew) employee performance was necessary because of differences in cultural contexts, since this instrument was made globally and standardized nationally; there were cultural peculiarities in various regions in the Philippines. Furthermore, since the existing instruments were written in English there was already a language barrier, which was also a source of performance measure error. Furthermore, aside from the mystery shoppers tools, there were several performance tools attached in the various human resource modules however, these did not measure the pit crew performance, hence an updated tool was still needed in order to measure pit crew employee job performance. Furthermore, there was a need for setting performance standard in a site level to achieve what was expected by the parent company.

With the stiffness of business competition in retail sales of automotive fuels and lubricants, human resources are the utmost key for the success of this business establishment, hence a study on gasoline station attendant or pit crew performances was timely and needed to develop an appropriate intervention program such as training or coaching.

Theoretical/Conceptual Framework

The construct customer orientation was grounded on Saxe and Weitz (1982) work on Sales Orientation Customer Orientation (SOCO) Scale as well as Williams and Wiener (1990), who asserted that customer orientation is a learned behavior that can be influenced by environmental factors, an adaptation that evolves over time. Individual salespeople may adopt a customer orientation as a result of organizational and marketing management practices (Williams & Wiener, 1990).

The customer orientation of salespeople is central to modern sales theory. The primary focus of marketing and sales efforts in the current business environment is to accurately determine and satisfy customer needs in order to create value in long-term relationships, and this is the essence of customer orientation. This long-term orientation of salespeople toward their customers, or customer orientation, is "the practice of the marketing concept at the level of the individual salesperson and customer" (Saxe & Weitz, 1982, p. 343). This concept was based on the principle that salespeople must understand a customer's needs and wants in order to generate customer perceived value in sales interactions. A high level of customer orientation reflected a high level of concern for the customer's long-term needs, while a low level of customer orientation reflected a selfish concern for the achievement of short-term sales objectives. A salesperson's concern for the customer is an emotional investment, which has been shown to act as a strong motivator that is associated with higher levels of performance (Brown, Widing, & Slocum, 1997).

According to Pettijohn, Pettijohn, and Parker (1997), salesperson skills may be defined as the salesperson's capabilities regarding their sales presentations, need identification, suggestive selling, product knowledge, time allocations, and orientation toward assisting the customer. Thus, additional tasks (e.g., customer-oriented selling) could be well beyond the unskilled individual's capabilities. Conversely, salespeople who have a well-developed array of sales skills may be assumed to be more capable of engaging in customer-oriented sales activities. Individuals with a wide array of well-developed sales skills should also be more willing to engage in customer oriented sales activities because these individuals would be able to adopt a longer-term orientation and sacrifice short-term results.

With these theories and principles this study conceptualized customer orientation, selling skills and job performance as the variables understudy. The output of this study would be a training program intervention vis-à-vis the results of the study.

Figure 1 explained that customer orientation, selling skills, and job performance ratings were aspects to be considered in developing an intervention program. The first box would explain that the level of job performance for pit crew employees in terms of customer orientation and selling skills were important determinant of job performance. Likewise, customer orientation which included building a good customer relationship and developing a helping ability of the pit crew to the customers as well as selling skills which included the knowledge of pit crew employees about the products they were selling and their ability to persuade customers in purchasing higher amount or higher quality of fuels or lubes were important elements to consider in developing an intervention program. The second box would explain that the perceived job performance rating such as achieving sales target, absenteeism, conduct, low in customer complaints, low spillage, and accuracy in service were important in identifying specific training needs of pit crew employees

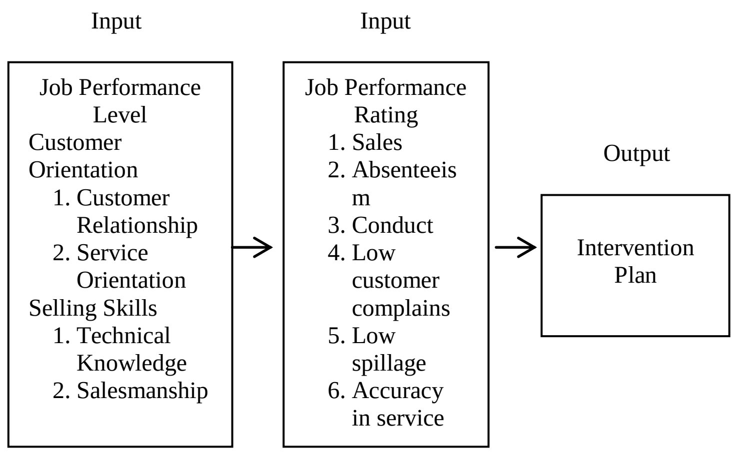

Figure 1: Conceptual Model on Job Performance and Job Performance Indicator

Methods

Descriptive-survey research design was utilized in this study. This method answered the questions pertaining to the respondent's perceived job performance rating and job performance levels. It was also used to identify possible training intervention program that would improve job performance of pit crew employees.

The study was conducted in four gasoline stations located in Davao City. All four stations were privately owned companies engaged in retailing of automotive fuel, lubricants and liquefied petroleum gas industry. Retail sites were classified as company owned dealer operated sites (CODO site). The forecourt area (refueling area) was the primary business unit of the company. At an average there were 14 front line employees (pit crews and cashiers) who served the shop floor (forecourt). The study was done in a non-contrived setting (i.e., no interruption in the normal course of work).

Respondents of the study included all pit stop crew employees of participating sites. Pit crew employees are gasoline station attendant whose primary responsibility is to sell fuels, oils, lubricants and liquefied petroleum products. To increase sales volume they are required to offer value added services, do suggestive selling and be positive in their work so that they will be able to delight customers by making them smile for them to keep coming back to the gas filling station.

There were 40 pit stop crew employees actively working in the participating sites. Ten pit crew employees were involved in the pilot study and the remaining 30 participated in the actual data gathering. The study made used of a researcher-made questionnaire to gather data. The research instrument was drawn on a seven page letter size homogenously scaled questionnaire. The instrument was written in English with *Cebuano* translation.

The development of the scale started with the reviewing of existing assessment tools that measure organizational performance. These tools included questionnaire used by mystery motorists to assess if pit crew employees were delivering the service standard and other operational standard. Other similar tools reviewed were "the show me what you got" (talk not tick), and territory manager site review questionnaire used by territory managers to see any corrective action to improve site performance, as well as the competency profile and job description used to measure employee work performance. The researcher only dwelled on the aspect of employee performance.

Secondly, the job description of pit crew employees were reexamined and updated based on the dictionary of occupation title – ONET. Thirdly, notes were reviewed during the meetings with the station manager on expectations on performance and behavior of the pit crew. Furthermore, the pit crew reviewed existing job analysis instruments to confirm if there was conformity between what the crew was doing and the expectation of the manager vis-à-vis the standards of the company.

Thereafter, the first questionnaire was drafted based on the information gathered. Three different scales were initially drafted that measure pit crew performance. The first scale was on a holistic rubrics format based on the specific competency, the second format was developed on a 4-point Likert scales with 5 items for each construct and the third format was on a checklist of needs assessment topics. These three formats were reviewed by the adviser who suggested merging the three questionnaires into a single instrument containing the objectivity of the rubrics scale, the specific behaviors in the Likert scale questionnaire and the training topics listed on the third scale to make one comprehensive tool to measure pit crew performance.

After constructing the first instrument, the researcher searched for existing literature on measuring job performance of sales people. The researcher found the SOCO Scale by Saxe and Weitz, an instrument to measure salesperson's customer orientation. This instrument was developed to measure how salespeople engaged in customer-oriented selling. The instrument had drawn samples from retail vehicles sales, wholesale food sales, retail clothing sales, industrial packaging sales, retail sales clerk, companies selling electronic components to manufactures and distributors, a dealer of selling motor vehicles to the public, and two sales forces of business and government organization. Since the instruments were used only on a pure sales business environment unlike gas station business which has services, the current SOCO scale was deemed inappropriate to be used in this study because of the cultural context. For instance the statement: "I *paint too rosy a picture of my products, to make them sound as good as possible,"* is an idiomatic expression which is not comprehensible to the respondents since most of the respondents are not equipped to comprehend the English language.

In this context, the scale was only patterned from SOCO and decided to develop an instrument to measure the pit crew performance and to identify training needs. The scale was structured as Customer Orientation Selling Skills (COSS Scale) and categorized the statements derived from the first draft according to customer orientation (customer relationship or service orientation) and selling skills (technical knowledge or salesmanship).

The second draft of the questionnaire was content validated by the company trainer and office staff. The trainer had been with the company for more than five years and worked as a gas station attendant with the competitor. The office staff had been with the company for four years. Both employees were groomed for work in station operations and rose through the ranks. They were chosen by the researcher because of their knowledge and experience in the work. They validated whether or not the instrument covered the entire scope of pit crew employee performance. They also checked some words, sentence structure and grammar of the *Cebuano* translation. The two evaluators confirmed that the content of the questionnaire covered the scope of the work of pit crew employees, although they reacted to the length of the questionnaire. They also identified some questions that were repetitious.

Following their comments and suggestion, the questionnaire was enhanced and presented the same to other expert judges in the field of psychology, statistics, counseling, and human resource. Each question in the research tool was rated by the judges according to the following criteria: clarity, objectivity, and conciseness. The ratings were as follows: *poor, fair, good, very good,* and *excellent*. Revisions based on the recommendation of experts were done. The experts rated *very good* on the following criteria: clarity of direction and items *(m*=4.00*, sd*=0.82*)*, presentation/organization of items *(m*=4.00*, sd*=0.82*),* suitability of items (*m*=4.00*, sd*=0.00*)*, attainment of the purpose *(m*=4.25*, sd*=0.50*)*, scale and evaluation system *(m*=4.00*, sd*=0.82*).* On the other hand expert judges rated *good* in terms of adequacy of items per category *(m*=3.5*, sd*=0.58*)* and objectivity of the items *(m*=3.75*, sd*=1.26*).* In general the scale was rated *good (m*=3.93*, sd*=.60*)* by the experts.

The instrument was piloted among 10 pit crews of the responding company who reported that before taking the survey, majority of them felt afraid with what questions to be asked, but later enjoyed answering the questionnaire because it was all about their job. After taking the survey they also felt the scale was quite long but manageable. During the run of the pilot study, the respondents found out wrong spellings, grammar and suggested enhancement for the *Cebuano* translations. The respondents extended their help to make the instrument more localized by interviewing customers (especially the elderly and *Lumad* in Davao) on their suggestions on the appropriateness of the translation. After a couple of revisions, the instrument was then reviewed by two respondents who joined the pilot study and the two experts in the company who first validated the first draft.

The final questionnaire was composed of three parts which measured the level of job performance of the respondents. It was designed to assess performance and gaps and evaluated the respondent's performance as *very low, low, average, high or very high*. Part I was the respondent's socio-demographic profile, which the respondents answered by indicating the appropriate information pertaining to the participants profile and Part II was the performance evaluation. The second part of the questionnaire was composed of two sections: the first section was intended to measure specific performance indicator (i.e., customer orientation and selling skills); the second section was designed to measure self-evaluation on job performance which was answered by the respondents themselves. The questionnaire was composed of 70 items. As presented in Table 1, items 1-30 were questions pertaining to customer orientation, items 31-60 were questions pertaining to selling skills and items 61-75 were questions pertaining to job performance rating of pit crew employees. Specifically items 1-15 it measured customer relationship construct, items 16-30 measured service orientation construct, subsequently items 31-45 measured technical knowledge and items 46-60 measured salesmanship construct.

The instrument had an overall reliability index of α=.937 which indicated a *very good* measure of job performance. Particularly, the customer relationship sub-scale had a reliability index of α= .83 while service orientation scale sub-scale had a reliability index of α= .84. On the other hand the technical knowledge sub-scale had a reliability index of α=.88 while salesmanship sub-scale had a reliability index of α=.83. Furthermore, the self-rating job performance scale had a reliability index of α=.66.

Table 1. Job Performance Questionnaire Table of Specification

Construct	Item No.	Total No. of Items	%
Customer Orientation			
1. Customer Relationship	1-15	15	20
2. Service Orientation	16-30	15	20
Selling Skills			
1. Technical Knowledge	31-45	15	20
2. Salesmanship	46-60	15	20
Job Performance	61-75	15	20
Total		75	100

Each item was answered by the respondents by encircling his or her choice. The Likert scale was used wherein the respondents were asked to respond to each statement in terms of 5 degrees of agreement in job skills evaluation (*never, rarely, sometimes, often, and always and none, very little, little, much, very much).*

The systematic approach to conducting survey was used. As cited by Timakhlai, there are six steps, and these are: First, is identifying reason for survey. Second, obtain management commitment, third, develop survey instrument. Fourth, administer survey instrument. Fifth, tabulate survey. Sixth, formulate training program to improve job performance.

Self-administered questionnaire can be distributed in a number of ways. The most convenient procedure is to distribute the questionnaires to group of participants who accomplish the instrument together at the same time. This approach has the obvious advantage of maximizing the number of completed questionnaire and allowing the researcher to clarify any possible misunderstanding about the instrument. Group administrations are often possible in industrial setting and might also be feasible in educational, hospital and community settings.

The respondents were divided into two groups. The first group included pit stop crew whose duty was on the second shift (2PM – 10PM) and third shifts (10PM – 6AM), while the second group were the respondents whose duty was on the first shift (6PM – 2PM). For both groups the participants were given specific instructions to answer the questionnaire individually, and honestly as possible, informing them that their answers would be treated confidentially and management will not count it against them. This was to ensure accuracy in the data gathered by establishing trust.

After administering the survey, the researcher tabulated and analyzed results of the data gathered. These data were then transformed into information as a basis for the study's primary purpose, which is to develop a training program for pit crew employees to improve their job performance.

To interpret the specific job performance indicator the average of the 15 items were derived per indicator. The following scale, mean ranges and description were used.

Table 2. Scale to Interpret Specific Job Performance Indicator

Scale	Mean Rating	Description	Performance Level
1	1.0 – 1.4	Never or None	Very Low
2	1.5 – 2.4	Rarely or Very Little	Low
3	2.5 – 3.4	Sometimes or Little	Average
4	3.5 – 4.4	Often or Much	High
5	4.5 – 5.0	Always or Very Much	Very High

To determine the performance evaluation rating, the average of the 15 items were derived that measured pit crew performance. To interpret the level of pit crew job performance the following scale, mean ranges and description were used.

Table 3. Scale to Interpret Pit Stop Crew Job Performance Rating

Scale	Mean Rating	Description	Performance Level
1	1.00 – 1.74	Never	Very Low
2	1.75 – 2.49	Rarely	Low
3	2.50 – 3.24	Sometimes	Average
4	3.25 – 4.49	Often	High
5	4.50 – 5.00	Always	Very High

Results and Discussion

The pit crew employees rated themselves *high* in terms of their job performance. This was expected for a self-report rating scale. The self-report rating usually tends to represent the respondents as desirable (Callegaro, 2008), and this is a limitation of this study. The employee job performance rating was based on self-report measures rather on an authentic measure of job performance. Thus, this study recommends that the evaluation of employee performance should be done by a three-member stakeholder team.

The result showed consistently high scores in terms of pit crew customer orientation and selling skills. However, the pit crew employees were low in achieving daily sales target both in fuels and lubricants. Generally pit crews were lagging behind their sales target because of the road construction undergoing in two locations. Likewise, because two sites were newly occupied by pit crew employees, customers from the previous management might have been absorbed with the latter. This implies that, aside from the pit crew employees, the management also has to work on its marketing strategies to increase sales targets. Furthermore, the work environment study conducted by Yap (2012) among the service station employees showed that the lowest satisfaction rating among these employees was on performance review confirming an earlier study (Yap, 2011), that receiving feedback from their managers and co-employees were only moderate. This implies that the weakness of the company was on giving feedback on employee performance which might demotivate people to work hard to increase sales, possibly because employees do not know their performance and that of the company's. Therefore, this study recommends that the company should strengthen its marketing strategy to achieve its sales target. A toolbox meeting is suggested to initiate a discussion on sales results. The management and staff will be able to have their action plan and re-entry plans from this toolbox meeting and feedback. Mentoring and coaching might also be effective ways to increase sales, customer satisfaction and most of all employee motivation.

The high rating on customer orientation implies that pit crew employees satisfy customer needs. It also shows that pit crew employees have the desire to provide customer satisfaction, establish long-term relationships, and avoid behaviors that sacrifice customer's interest in order to make a sale in the short-term as posited by Saxe & Weitz, (1982) Similarly the results of the study confirmed the results of the company's third-party audit on customer service which had an average rating of 94.9 percent from years 2006 to 2012 and the online customer satisfaction survey of the cluster which had an average rating of 90 percent. For this exemplary performance the company was a recipient of the Gold Retailer award for the 2nd Quarter of 2008 showing that the company provided excellent service to customers.

The pit crew employees had high selling skills indicative of their proficiency in the delivery of their tasks. According to Pettijohn, Pettijohn, and Parker (1997), a salesperson who lacks basic sales skills may be ill-equipped to engage in activities that would likely lead the customer to be satisfied because this individual is incompetent to perform the assigned tasks. Mehrabi, Shoja, & Karim (2012) likewise stated that selling skills have an intervening role in customer orientation impact on sales performance and that higher level of selling skills increase impact of customer orientation on sales performance. The results imply that pit crew employees were really leading the customer to be satisfied. These results validated the recognition and award received by the company as Top 10 Retailers in Mindanao in 2010. The foregoing shows that pit crew employees and the management were doing their tasks to make their customers happy. The high rating in job performance, specifically in customer orientation and selling skills, can be further improved by enhancement training.

Pit crew employees showed very high performance in terms of the customer relationship as in: "thanking the customer," "courteously greet customer," and "giving friendly greeting to the customers." Likewise they were very knowledgeable in terms of technical knowledge such as "health, safety, security, and environment –HSSE) policy of the petroleum company", and "the difference between gasoline and diesel." Moreover, the results show a very low rating in "reporting to work under the influence of alcohol," which implies that these pit crew employees have been following the safety policy and the company policies. Following the company's policy was indicated by having a very high performance rating in terms of "reporting to work always." In terms of salesmanship "encouraging the customer to join in-house retailer promo", and "petroleum company-initiated promo" were also very high.

The pit crew employees were found to be high in the following work behaviors: In terms of customer relationship: "cleaning the site to ensure that it is ready to serve the customer," "waiting for the customer in a vacant filling island," "recognizing customers while serving the current customer," "greeting the customer with a pleasant voice," "greeting the customer with a smiling face," looking at the eyes of customer while talking with them," "entertaining customers after serving the current customer," "using of different ways to make the customer happy," "saying goodbye to the customer," "guiding out the customer out from the gas filling area", and "giving a friendly reminder to the customer to drive safely." In terms of customer orientation: "persistently offering the promo, full tank, up selling sales, and upgrading sales", "encouraging customers to gas up full tank, upgrading fuel and lubricants sales. However, they only possessed average knowledge on "the products the company is selling", "octane rating, octane rating of the gasoline station products, and counterpart of octane rating on other brand name," The Health Safety Security and Environment (HSSE) principles such "goal zero principle," and "life saving rules of the gasoline station." These results confirm the previous study of Yap (2012), which found out that from the newly hired pit stop crew from year 2008 – 2012, 39 percent need to master HSSE principles and 45 percent need to learn product knowledge.

It also showed that the pit crew employees manifested average performance in terms of service orientation, such as "calming down an angry customer," "referring to service bay for mechanical job," "offering customer to check oil level," "toping up engine oil," "adding radiator water," "giving clients tips on how to save fuel," and "helping the customer bring his or her things upon approaching the service bay." Likewise, the pit crew employees have average technical knowledge, specifically on "automotive services that the company is offering," "cetane rating," "cetaine rating of the company's products," "counterpart cetane rating on other brand name," "viscosity level," "viscosity level of the company's products," and "counterpart viscosity level on other brand names." Same results were obtained in salesmanship skills such as: "upselling fuel and oil purchase," "giving suggestion of the best fuel and oil match to the customer's car," and "encouraging the customers to enroll with the station's rewards program." These results showed that employees were only average in performing these activities. This implies that these tasks or behaviors were not done on a regular basis confirming the mystery motorist customer service audit result conducted on the 2nd quarter of 2013. Aside from the road construction scenario discussed earlier, inconsistent delivery might have been one of the reasons why they were not getting their daily sales target. While it may be true that the sales target is unreachable, but being constant in their performance ("*ceteris paribus"*) can translate into sales. Thus further training is recommended.

Despite the fact that the pit stop crew employees were customer oriented and proficient enough to undertake their tasks, some pit crew employees seem to be very low in terms of performing their new role which is to give an extra mile of service to the customer. For instance, "opening the door of the car of the customer after he or she look at the way the crew refuel the customer car tank". This result was manifested in the latest 2013 mystery shopper customer service audit. In addition, they appeared to be low in terms of aggressive selling such as encouraging customer to enroll in cards offering fuel rebates. This shows a gap between what is expected with the pit crew employees and what they actually do. On the other hand, the pit crew employees showed very high respect towards their customers and were knowledgeable with the basics and were constantly offering the promo. Also, pit crew employees delivered their task accurately as they "return the credit card and fleet card to the right customer," "giving exact change," "refuel cars with the right product," "following safety procedures," and "keeping the refueling spillage free."

Conclusions and Recommendations

Study results suggest that pit crew employees were really working their way to give the customer a great refueling experience. The pit crew employees were working their promises to the customers to ensure everything works, that the site is clean and bright and that they deliver quick services. However, there are still opportunities to improve in the way pit crew employees treat customers as guest. The current mystery motorist customer service audit confirms this, showing a score of 62.2 percent in treating customers as guests at one site and 53.8 percent at another site which is clearly the weakness of pit crew employees. Therefore, it is suggested that a training program for pit crew employees on building customer relationship be initiated to improve pit crew performance. Training may have an impact on the salesperson's degree of customer orientation. Reynolds & Arnold (2000) suggested that firms should engage in training their salespeople to build customer satisfaction, because customer's level of satisfaction results in significant benefits to the retailers. The proposed training program's theme would be to uplift pit crew performance. Generally the aim of this training program is retooling pit crew attitude towards the customers. Since the study did not cover other mediating variables such as organizational citizenship variables—loyalty, harm avoidance, deviant behavior of neither employees, nor moderating variables like demographics, it is recommended that future researches take these into consideration and to undertake comparative studies on different gasoline stations locally and nationally. In addition, it is recommended that employee performance be measured holistically, and for the appraisal tool to include actual work performance. For instance, the company can divide the three sections in appraising employee performance: Part I - measuring productivity outputs; Part II -measuring competencies (customer orientation and selling orientation); Part III - measuring employee behaviors and attitudes such as honesty, teamwork, dependability, motivation and communication. Furthermore, it is recommended that follow up studies be done based on the results of this study. An in-depth analysis on what keeps pit crew employees performing at a very high level of performance or otherwise may be done. Lastly, the COSS instrument developed may be used by other gasoline stations to further validate the instrument and its applicability to other settings.

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USAGE OF MOBILE PHONES AND INTERNET SOCIAL MEANING AND FAMILY CONVERSATION

Noel E. Margate, MAGC, RGC

The study was meant to describe the social meaning of the mobile phone and the Internet as perceived by the selected college students of San Pedro College. A qualitative-phenomenological research design was used to describe how the said technologies were used and how the face-to-face conversation and the virtual connection in the family were carried through. The research data were gathered through a series of focus group discussions (FGDs). The social meaning of the mobile phone and the Internet was found to be influenced by the type of technology attachments the college students were formed. The FGD participants who showed functional type of attachment merely considered the aforementioned technologies as utility devices that were instrumental in attaining social and academic responsibilities. On the other hand, those that exhibited structural type of attachment viewed the mobile phone and Internet as basic needs and as source of emotional comfort. While both technologies were helpful in expanding the face-to-face conversation to the virtual connection with the families, the mobile phone was found to be more accessible and widely used means to obtain personal updates in life, share information of all sorts and indirectly express emotions with ease. The study concludes that based on the flow of the family conversation, family values and moral purpose were imparted as part of the formation and foundation of their individual self. However, the banality and the eventual shift of technology attachment from functional to structural purposes seemingly influenced the virtual connection with family members. Thus, the flow of the family conversation where family values and moral purpose are imparted is apparently affected.

Introduction

People globally have apparently looked madly crazed and lured by the wonders of the information and communication technologies (ICT). Ownership and usage of the mobile phones and the Internet are now seen ordinary gestures of human activities. In other words, what we thought before as technological luxuries are now considered basic personal properties that are essential in day-to-day living.

Initially, the progression of these phenomena dwells on the human need of constant and faster contact or communication. By simple phone calls, text messages and electronic mails, face-to-face encounters are considerably extended and sustained (Gergen, 2002). As technology continues to accelerate connection in different contexts, it eventually permeated into the culture of most societies. Besides, the colorful experiences of fun and excitement in every electronic encounter favorably promoted recursive usage.

Along with the need of faster communication, is the fast advancement of technology. Modern and superior electronic gadgets are constantly setting new trends, functions, various forms of interaction and more extensive spheres of information and contact. Most of all, these advancements have paved the way to the interconnection of mobile phones and Internet or the existence of the virtual world or reality that unthinkably transcends the boundaries of time, space, age, race, ideologies, lifestyles, etc. These technologies empower all users to perform and respond to various tasks in a single time interval. Thus, no doubt that most of the populace worldwide are allured of the convenience, benefits, and amusement.

However, while the mutual development of technology and economy continues to soar, new and unusual social incidences such as net dependency, online game addiction, cyber pornography, latest phone model hysteria, etc. are found to have growingly emerged in human communities. Moreover, the influences of social relationships and social institutions like churches, institutions, communities, and most especially families are perceived to have weakened. These technological phenomena have subtly turned into a major powerful force where one's identity, relationships and life in general are increasingly defined and shaped especially among the young individuals who are obviously considered the largest technology users. In short, the acculturation of mobile phone and Internet has transformed the online network connection or virtual world into a new global necessity that evidently demanded and elicited new patterns of social behavior.

Thus, new values and precepts towards the mobile phones and the Internet came to surface beyond the boundaries of simple communication devices. These days, these technologies are now significantly defining and directing attitudes towards social relationships and social situations, and are profoundly creating new and unimaginable human identities and societies.

This paper intended to find out the social meanings that the young individuals have associated with mobile phone and Internet. It also examined the manner in which these gadgets were utilized. More importantly, the findings were then used to describe the dynamics of face-to-face conversation and virtual connection in the family. Furthermore, this study is seen to provide basis in understanding the young people or even the family who are actively shifting their transit from the two different spheres of the physical and the virtual world.

Theoretical/ Conceptual Framework

The social construction theory according to Gergen is concerned with explicating the process by which people come to describe, explain, or otherwise account for the world (including themselves) by which they live. It attempts to articulate common forms of understanding as they now exist. Gergen (2008) noted that what we take to be true about the world is not born out of the picture in our minds, but out of relationships.

More importantly, Gergen (2008) pointed out that while constructionism is relevant in spreading and maintaining traditions, it is further offering ideas of building new futures. The expanded relationships we have where we acquired various world meanings are highly facilitative and potent of emerging new forms of language and ways of interpreting the world. It is leading towards generative discourses of everything that are at the same time challenging the existing tradition and offering new possibilities for action (p. 12).

Considering the aspect of technological change, it is said to be driven by social processes rather than any internal technological logic, according to Bruun and Hukkinen (2003). Additionally, it is functionality that prompts a new artefact or material to work better. But technical properties and purpose that determine the functionality of artefact are said to be made by people and not by any non-social realm of technology (Bruun & Hukkinen, 2003).

Family systems approach on the other hand is grounded on the assumption that the individual cannot be fully understood apart from the family system. Its basic principle points out that a change in one part of the system will result in a change in other parts of the system. Thus, if the family unit changes in significant ways particularly aspects of family communication, these changes will have an impact on the individual.

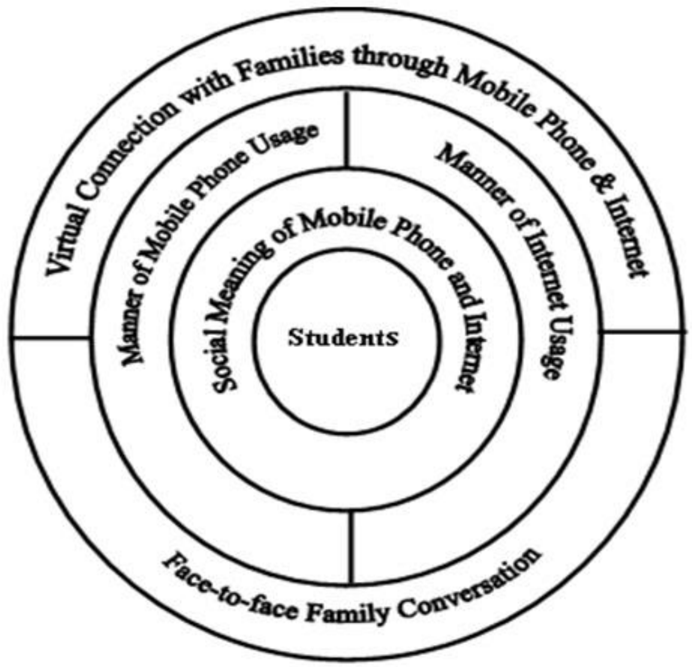

Figure 1. The Schematic Diagram of Students Whose Social Meanings on Mobile Phone and Internet Vary Likely Affects the Way they Use the Technology and the Way they Converse and Connect with their Families.

Methods

This study utilized a qualitative-phenomenological research design to describe the social meanings associated with mobile phones and Internet, the manners in which the mobile phones and Internet were used, and the manner in which the face-to-face conversation and the virtual connection with the family were carried through.

The study was conducted at San Pedro College, Davao City. The said institution is owned and managed by the Dominican Sisters of the Holy Trinity. It is primarily offering allied medical programs such as Nursing, Medical Laboratory Science, Pharmacy, Physical Therapy, Respiratory Therapy, and Biology. However, nonmedical programs are also available like Education, Business Administration, Information Technology, and Psychology.

Selected college students across all year levels and course programs were the target respondents of the study considering that majority of the techno-savvies are educated and young individuals (Kioskea.net, 2009). The means of selecting the respondents was through purposive or convenience sampling technique. The economic status of the family was also noted to supplement the analysis of results.

The research data included the thoughts, feelings, practices, and experiences of each participant on the mobile phones and Internet. Focus group discussion (FGD) was the means where the said data were collected. Data analysis was made through categorizing and classifying the individual responses into themes and issues.

The first thing that was done was to seek permission to conduct the study at San Pedro College (SPC) through the Vice President for Academic Affairs. Afterwards, selected groups of 6-10 students from the first year to fourth year level or from the allied medical and nonmedical programs were invited to participate in the FGD. The FGDs were held in a group counselling or testing room of SPC. Each discussion was started by a presentation of the background and objectives of the study. The participants were also requested to wear a nametag and introduce themselves to the group. Their consent was requested too that the entire discussion shall be audio-recorded yet shall be held with utmost confidentiality. Each of the 5 major research questions was printed on a whole sheet of bond paper. As the discussion began, each question was read twice to the group and was presented one at a time. Each participant was also encouraged to take turns in sharing their answers in a successive manner. The discussion was solely facilitated by the researcher. All the guide questions were asked and a total of four FGDs were conducted. After completing all the FGDs, all audio-recorded responses were transcribed into text for analysis. However, the first focus group was eventually discarded as the audio-recorded file was barely comprehensible. The transcripts of the 3 discussions were translated first into English language. The thematic analysis of transcripts were then made by following the open coding technique of Strauss and Corbin (1998) where the text was ran through line by line in relation to the notes and observation that took place during each, chunks of the text that suggest a category were marked, and categories were named and ascribed with attributes.

Group Composition

Focus Group 1

The respondents were an aggregate of four 3rd year and five 4th year Bachelor of Science in Nursing students. Four of the 4th year students were noted to be living away from home. While they came from different year levels and sections, their consent to participate in the FGD came easily as they happened to share common acquaintances and vacant time. All of them claimed that they have been using and owning mobile phone and Internet for quite a time. But six have strongly expressed negative positions towards cessation of the said technologies. On the other hand, the remaining three simply said that such scenario did not bring so much loss in their lives. As the discussion went towards the last question, three participants requested to leave the session due to an important concern.

Table 1. Profile of Focus Group Respondents

Conditions	Year Level and Course	Number of respondents
Living away from home	4th Year Nursing students	4
	2nd Year Psychology student	1
	2nd Year Education students	4
	1st Year Pharmacy students	4
Residing in Davao City	3rd Year Nursing students	4
	4th Year Nursing student	1
	1st Year Psychology student	1
	2nd Year Education students	2
Don’t want mobile phone and Internet to end	3rd Year Nursing students	2
	4th Year Nursing students	4
	1st Year Psychology student	1
	1st Year Pharmacy students	4
Mobile phone and Internet are not so much of a loss	3rd Year Nursing student	1
	4th Year Nursing students	2
	2nd Year Psychology student	1
	2nd Year Education students	2

Colored cell = FGD group number; light blue – group 1, light green – group 2; white- group 3

Table 2. Profile of Focus Group 1 Respondents

Conditions	3rd Year Nursing Students	4th Year Nursing Students
Living away from home	-	4
Residing in Davao City	4	1
Don’t want mobile phone and Internet to end	2	4
Mobile phone and Internet are not so much of a loss	1	2

Focus Group 2

This group of students was a composition of special study grant recipients of SPC. Only two students were taking up Bachelor of Science in Psychology while the rest of the six were taking up Bachelor of Science in Education. Their participation was purposely recommended to provide a description of students who belong to families with low economic status. Since they frequently meet and work together during their duty assignments in the different offices of SPC, asking their consent was not a difficult task. All respondents were females as there were only a few number of males in their rank. As many as five in their group as well were noted to be living away from their families. In terms of technology penetration, everyone owned a mobile phone but the usage of Internet was seen to be less frequent. Six participants articulated that they might be highly affected when the function of the aforementioned technologies ceases the following day. The other two however with dissenting statements mentioned that their lives may still be fine without it.

Table 3. Profile of Focus Group 2 Participants

Conditions	1st Year Psychology Students	2nd Year Students	
		Psychology	Education
Living away from home	-	1	4
Residing in Davao City	1	-	2
Don’t want mobile phone and Internet to end	1	1	4
Mobile phone and Internet are not so much of a loss	-	1	2

Focus Group 3

This group has the smallest number of participants. There were only four Bachelor of Science in Pharmacy female students who came to join the focus group. All of the four as well were living away from their families. During the discussion, spontaneity of responses was noticeably observed as they were all familiar with one another. Based on their sharing, all of them said that they did not want the said technologies to stop. It may highly lead their lives to be more difficult. But there was one who was willing to let go of the Internet as she generally saw it as a mere vehicle of socialization.

Table 4. Profile of Focus Group 3 Respondents

Conditions	1st Year Pharmacy Students
Living away from home	4
Residing in Davao City	-
Don’t want mobile phone and Internet to end	4
Mobile phone and Internet are not so much of a loss	-

Results and Discussion

Social Meaning on Mobile Phone and Internet

Based on the hypothetical scenario where the mobile phone and the Internet's existence were impending to end, two forms of technology attachment came to surface. The functional type of attachment was first noted that generally recognized the practical and instrumental uses of the mobile phone and the Internet. A structural form of attachment that further portray the technologies mentioned above as basic needs in life and, at the same time, as sources of emotional comfort, was also noted.

Functional Attachment

Katz and Aakhus (2002) also made an implication that the examination of the usefulness of the ICT devices follows a functionalist perspective.

Similarly, the mobile phone and the Internet were generally recognized as modern utility devices. These technologies were found instrumental in the completion of academic requirements and tasks. The devices were also helpful in attending various social concerns and responsibilities in the family and friends. However, the absence of the said technologies in life was seen insignificant. The daily routines of those who claimed this response were noted to have continued without being so dependent and without giving much thought or priority to the mobile phone and the Internet. One of the focus group participants stated this experience.

"It is fine for me (without mobile phone and Internet) because I am not used to send text messages. It is even okay for me whenever my cell phone is left at home. In one week, it is seldom for me to load my cell phone. I only load when it is really needed, when it is needed for a project and when it is needed to contact somebody."

The technology was observed as well to have brought about ironies to human activities. Accordingly, while it had facilitated faster connection and communication, it had also caused procrastination and disruption of the daily household chores as text messages and other mobile phone features were instead given more attention. This observation was noted from a focus group one participant through the following statement.

"I used to quarrel with my younger sibling because she is a heavy text user. It seems that our daily routine is disrupted because of her. When she is asked to do a chore, she will retort, 'wait for a while I will first attend to my text messages.' I'm really annoyed with procrastination. It is really fine for me when cell phone is no longer there."

On another note, though it had broadened the reservoir of knowledge and made the access of information only a click or a type away, many students were also slothful to read and think further for their studies. It was cited too that social networking in the Internet was not that important. Thus, letting it stop or cease would not be that hard. A focus group two participant cited the following thoughts.

"There are certainly advantages to those who do not know how to write because their eagerness to write and send letters will be practiced. Whenever (the) Internet is no longer accessible, libraries in schools will be more useful in doing research. Most likely, students are likely led to use their head."

Structural Attachment

The structural type attachment is patterned after the construct of Katz and Aakhus (2002) that the ICTs were formerly seen to be existing in an untamed and wild state, but are now tamed and integrated into the household like pets that are part of the domestic life.

This form of attachment was noted to have viewed the mobile phone and Internet in two fashions. The first perception identifies the connection with families and friends for various concerns and access to the reservoir of information as basic needs in life. The second one seemingly describes the technology as persona of relationship and as source of emotional comfort.

Basic Need

As the mobile phone and the Internet fostered connectivity with families and friends online both near and far (Kennedy, Smith, Wells, & Wellman, 2008), its importance became identical to the level of the basic needs. As noted in the lives of the focus group participants, families were simply a call or text message away that important concerns and personal updates in life were readily conveyed especially by those who were living away from home. Classmates and friends were promptly asked as well pertaining academic endeavor, social relationships, and gossips. Completion of tasks and errands, and request for monetary needs were easily coordinated and made possible, too. A focus group three participant was in one with this idea as she reported this answer.

"It's difficult (absence of mobile phone). Considering that you are far from your family, how could you communicate? In case of emergency, how would they know what happened to you? It will also cause delays and other incidences that you have not been expecting."

Emotional Comfort

Aside from the perception on the mobile phone and Internet as basic needs in life, the ownership of these technologies has further manifested traces of emotional attachment. This observation was marked in the findings of McQuail (2001) that use of media use behavior is frequently not very rational, motivated, or planned, but is a result of habit, circumstance, and change, as well as being moved by emotions.

As the mobile phone and Internet extended the presence of others or seemingly became icons of significant others, the absence of the said technologies was observed to elicit unpleasant emotional responses. Students who were living away from home had made mention that they may frequently feel anxious and perplex on what they are going to do with their daily routines. Others also admitted having experienced boredom when they were unable to contact their families and friends. A focus group participant two said, *"Oh my God, please don't permit it (cessation of mobile phone and Internet). Maybe if it ends, I will get crazy."*

Those with long distance relationships with their boyfriends on the other hand were able to say that they might likely live an incomplete life. The mobile home had seemingly acquired a sentimental value as the said relationship was eventually maintained all throughout many years. This was the account of a focus group one participant.

*"In my case, I am in a long distance relationship with my boyfriend. So for us, it is the only way of communication because our relationship is able to survive for 6 years through the use of cell phone, text messages, and calls. It would be incomplete, it would be lacking because mobile phone and **Internet** are already part of my life and my routine."*

Moreover, the attachment to the mobile phone had seemingly penetrated into the core of emotions. Its role in life was placed in the sphere of social relationships by a few participants. As heartbreak is a common scenario when a loved one is lost, the same experience may be felt when the mobile phone is lost. The following was the thought of a focus group two participant.

"I may get too depressed or I may feel I was in a situation where there is death of a loved one because I may get really exhausted."

The device was considered a friend, too. It was the constant companion anywhere especially in solitary situations. As the various features of the device were interactively operated, relief was eventually elicited as a person's presence was seemingly felt. This scenario was reported by a focus group three participant.

"I used to pretend looking at my phone whenever I am alone. So, it is my friend because I used to pretend looking at my phone when I am not doing anything. It appears awkward for me when I am alone. I am really afraid when it seems I am all alone. I used to pretend looking at my phone as if I am doing something. I am really anxious."

Manner of the Mobile Phone usage
Uses of the Mobile Phone
Communication Tool

The mobile phone was found to be useful for various concerns. The device was generally seen as a primary channel of the virtual communication or connection by the functionally attached and structurally attached participants.

In the virtual connection of both categories, two types of social relationships were consistently cited. Connections were usually directed to their families and friends for various reasons. Within the family, issues regarding financial needs, relationships, update of one's life, academic concerns, and errands or tasks were the usual themes of connection. *"It's really about problems like money, shortage of what has been given, immediate need, and tuition fee when I send text messages to my parents (focus group 2)"*

On the other hand when it comes to their friends or classmates, the themes were mostly dwelling on academic tasks or school activities, update of one's life or latest happenings, and gossips. *"I usually text my classmates about academic affairs like updates of our projects and practices. I use mobile phone in order to contact my friends especially my group mates when we have case studies (focus group 1)."*

Utility Device

Both categories were also noted to have utilized the auxiliary features of the mobile phone like calendar, alarm clock, reminder, organizer, note pad, etc. The said features were found to be helpful in keeping abreast of their academic responsibilities and social functions in the family and in their circle of friends. *"I also use it as alarm clock so that I can wake up early to attend my 7:30 morning duty (focus group 1)."*

Means of Entertainment and Fun

The mobile phone was further considered as a gadget for entertainment and fun by most of the structurally attached participants. Listening to music or audio files and playing of microvideo games came out as the usual forms of pastime. *"I usually listen to my favorite songs that are new just like Hillsongs and acoustics (focus group 3)."* Another participant in the same focus group cited how she used her mobile phone for amusement and fun. *"I sometimes play games in my cell phone like Snakes and Sudoku. I am also viewing pictures, any pictures, repeatedly viewing them to get rid of boredom (focus group 3)."* It was also used to access the Internet by a single participant whenever she experienced boredom. Her mobile phone was found to be equipped with advanced features. *"I am also accessing Internet through my phone whenever I am bored (focus group 1)."*

Emotional Pacifier

Among the structurally attached participants who were noted to be using the mobile phone anywhere, the device was not merely used for entertainment and fun but was viewed as well as a provider of emotional comfort in idle or solitary situations. Similar to the feeling of being accompanied by somebody in sought of friends or company, the interactive features of the device evidently superseded anxiety and eventually reciprocated relief and calmness. *"I am also using it as if I am sending text messages when I am idle and alone though I felt very stupid. I did it by playing with my phone because I do not know what to do when I went to NSO considering that I had run out of text load and had no one to talk to (focus group 1)."*

Setting Where Mobile Phones were Usually Used

The difference of setting or situation where the mobile phones were usually used was not clearly distinctive between the functionally and structurally attached users. The general disparity instead was seen between the focus group 2 and the rest of the groups. The former oftentimes identified their homes or residences, whereas the latter reflected fluidity as they frequently used the device anywhere as possible. *"Wherever I go, at home, school, malls, gimmick, jeep, anywhere, my cell phone is always here with me (focus group 1)."* Seemingly, the economic status and the scholarship grants of participants in the focus group two may have influenced restriction or limitation on the way their mobile phones were used. Besides the fact that their financial capacity to own technologically advanced units was limited, they were likely used to the old policy that scholarship grantees could not use their mobile phones while rendering their duties or staying inside the school premises. *"I usually use it at home because we are not allowed to use it in school (focus group 2)."*

Dealing with Text Messages or Phone Calls
Setting Aside

The functionally attached participants were observed to frequently set aside received text messages or phone calls than the structurally attached ones as they were used to place their mobile phones in their bags. *"Honestly, I am not responsible when it comes to my phone because it is left at home most of the time. It seems that my phone is not the topmost priority inside my bag (focus group 1)."* However, further specific reasons why text messages or phone calls were at times set aside or ignored were also seen in both categories. The first one pointed out a cautious use of the device in the midst of formal events like classes, meetings or Eucharistic Celebrations. *"My phone is always turned silent and vibrating. I do not use ring tones because I am ashamed of being noticed by everyone around when I am attending important events like meetings and masses. I just also ignore and do not reply usual message (focus group 1)."* The second reason described a feeling of banality wherever general messages in the form of quotes or passages were received. *"But when it is like text quotes or asking me how I am, I am sorry since I really do not reply (focus group 1)."* Thirdly, an attitude of timidity on phone conversation was seemingly shunning others to answer or pick up calls. *"I am a person who does not like to answer phone calls. I prefer text messaging. Sometimes with calls, I am putting it in a silent mode, and I am not answering it (focus group 3)."* The next one talked about disregard of messages or calls as caused by one's prejudices towards the sender or caller. *"When I do not like to text the person, I usually tell him/ her that I have a class (focus group 3)."* Lastly, there was disinterest to reply whenever messages or calls were coming from unregistered phone numbers. *"I tend to disregard calls from unsaved numbers because it is unnoticeable in my phone. The importance of phone calls is eventually known when it is followed by a text message (focus group 2)."*

Eliciting Immediate Replies

The structurally attached, on the other hand, were bent to elicit immediate answers or replies. They were inclined to frequently check their mobile phones when ring tones were seemingly perceived. *"When it vibrates, even if it is silent, I can likely feel that there is a text message. So, I look at it. I have an attachment to my cell phone. I can feel the radar (focus group 3)."* However, both categories were noted to be prompt when text messages or phone calls were found to be coming from their parents. Generally, they were inclined to think that important concerns were meant to be conveyed especially by those who were living away from their families. *"Text messages from my family are mostly made when they really need something. They just do not need send messages for nonsense matter (focus group 2)."* This sense of urgency was seen in the report of Kopomaa (2000) that parents bought their children mobile phones to reassure and supervise the children regardless of where they were and what they were doing. Both categories were also bound to do the same when the messages were found to convey important concerns regardless of who the sender or caller was. *"When it comes to a phone call, I really answer it because it is* *so unusual to receive one and it is likely very important. When somebody calls you up it means there is something very important (focus group 1).”*

Moreover, aside from their parents or families, the structurally attached participants were also inclined to elicit immediate replies when the sender or caller was somebody whom they like or get attached with. *“But when I like the person even when we have a class, reply is really made (focus group 3).”*

In classroom scenario, the structurally attached ones were also noticed to easily reply messages when the discussions or lectures appeared to be boring. *“But I can reply when I am not doing something or the class is boring (focus group 3).”*

Manner of the Internet Usage

Uses of the Internet

Research Tool

Like the mobile phones, the Internet was seen to be helpful for several functions. The most useful function of the Internet in the lives of the functionally and structurally attached participants as students was its capability to provide facts and information of all sorts. As lessons and subject matter were instantly sought anytime with ease, the Internet evidently became surrogate for books and other references or even the libraries. Making use of authors’ or writers’ ideas was made effortless as well as text documents were instantly copied and pasted in computer office applications. Additionally, the Nursing Research Database of SPC may have been considered as one of major Internet resources of the students. *“Internet is really one of my important resources aside from my handouts especially in studying the concepts of nursing subjects. I just access and read further the topics that are not well understood or unclear (focus group 1).”*

Communication Tool

Perhaps, being able to connect to different people especially those who were residing in far places made the communication function of the Internet equally usable. The Internet brought instantaneous relationship to an exponentially increasing population throughout the globe (Gergen, 2000). This form of usage was noticeably visible among the structurally attached participants. They were using electronic mail, Facebook, and other chat engines just to get in touch with others. Kennedy, et al., (2008) accounted that the Internet is a key tool for young people to communicate, meet new friends and keep in touch with old ones. Generally, updates of personal or individual lives were the common issues being discoursed about. *“I am often using the Internet because I am always on access with Facebook. We always chat and have ladies talk with my best friend through YM. Our talk is mostly about how we are doing. We are telling each other what happened to us in a day (focus group 3).”* However for the functionally attached participants, the communication function of the Internet was primarily used for academic purpose. The electronic mail account was usually maintained to share and circulate important academic documents to other classmates or group mates in the study or project. *“I use the Internet in order to do research. I also use it to email our thesis especially that we have not submitted yet (focus group 1).”*

Means of Entertainment and Fun

Probably, this form of usage may not be as useful as the previous functions. However, all participants were noted to have experienced getting amused in at least one of its many features like music, videos, games, TV shows, and news and fashion. However, the structurally attached ones were mostly found to indulge further and get hooked up. *“I also love viewing videos and entertainment in YouTube, particularly America’s Got Talent because I can never catch it on TV (focus group 1).”*

Place Where Internet was Usually Accessed

Between the two categories of technology attachment, there was no apparent difference in matters concerning the place or setting where the Internet was usually accessed. An apparent difference was rather seen in the focus group two. Many in the said group were observed to have been renting only at an hourly rate in the Internet café. *"But I go to the Internet café outside when my Internet card (school access) is fully consumed (focus group 2)."* The focus groups one and three on the other hand were mostly noticed to have been using the Internet through the private connection of their respective residences. *"I only use Internet at home because I have no patience and I am easily annoyed at school where connection is very slow and computer units are already old as well (focus group 1)."* At times, the Internet was also accessed in Wi-Fi zones by those who owned a mobile computer or laptop. *"I usually use Internet inside my room because it is reachable by* Wi-Fi *(focus group 3)."* The difference was likely related to the economic status of the focus group participants. Generally, the more accessible the Internet was to them, the more frequently it was used.

Usual Responses When Internet Usage was Interrupted
Persistence in Using the Internet

Interruptions are social interactions with families and friends or technical incidences that cease the participant from using the Internet. Such incidences were seen to be responded to with persistence in the usage. Their response was observed to involve disregard of interruption and continuation of Internet access.

Generally, regardless of technology attachment types, persistence was manifested whenever completion of tasks through the Internet was highly urgent or academic related like course assignments and researches. *"But I tend to prioritize my research tasks when interruptions are merely minor. I just say hello to my classmates when they are around and I immediately go back to my tasks (focus group 2)."* The same form of response was also elicited every time they got stuck on the websites that provide online networking, games, videos, music, etc. *"I usually ignore interruptions when using the Internet. I am often scolded during mealtimes because I always say yes, yet still stuck in the Internet. Though my mother is already grumbling, my focus on the Internet is still persisting. Sometimes, I eat my meal in front of the computer (focus group 2)."*

Moreover, those with private connections in their respective households were inclined to assert continuous usage when interruptions were merely caused by the younger or submissive siblings. *"I really agree with my younger sibling and eventually get angry when he bothers what I am doing. He is often telling me that I have been viewing it many times since (focus group 3)."* Parents or guardians with tolerant attitude were also noted to perpetuate prolonged Internet usage. *"When it comes to my father and mother or sister I tend to request amiably if I seemingly want to continue using. My parents are not really authoritative (focus group 3)."* Others were noted as well to observe schedule of usage or to find time to wake up at dawn to enjoy nonstop use. On the other hand, participants who were living away from their families in residences or dormitories with Internet connection had claimed to have barely experienced minimal interruptions or none at all. Thus, Internet connection was taken solo all throughout. *"But no one really interrupts my Internet usage when I am in Davao (focus group 1)."*

Attended to the Interruptions

Their response tendency is described as the transitory halting of Internet usage to accommodate the concerns of the family members or friends. Similar to the previous one, without distinction to a specific technology attachment category, Internet activities were readily forgone when issues being posed by others were more important or pressing. *"I also compromise when I only use Facebook since it is not that necessary and it can really wait (focus group 1)."* Also, parental authority was still noted to discipline continuous Internet use. Generally, obedience and fear were evident over an imminent anger and scolding. *"I really obey instantly to avoid being scolded when my mother has errands at home in*

General Santos. I am also ashamed of being chided. Besides, the Internet is just there and can wait, instead of inciting rise of blood pressure of my mother (focus group 3).” A tendency to give up Internet usage was manifested too when the quality of connection was too slow to access favorite websites or when the computer being used was not their property.

Quarrel Out of Interruption

Among the structurally attached participants, continuous Internet use was causing trouble with their siblings. In some instances, argument and quarrel were noted over a seemingly unwilling behavior to relinquish one’s turn or to share the schedule for use. *“But sometimes, he would not simply stop that he needs to be told harshly (focus group 1).”* The quarrel of a single participant had even led to a physical fight. *“We had even engaged physically because of such situation especially when our usage is for important reasons (focus group 1).”*

Manner of Face-to-face Conversation with the Family
The Family Members Usually Conversed with

The face-to-face conversation with the parents and the siblings was noted to have frequently taken place in the family irrespective of the type of technology attachment the participants were identified with. In particular, the conversation with the mother was more frequent compared to the father, and the conversation with the sibling whom they happened to share the same personal interest frequently came about compared to the rest of the siblings.

Usual Issues or Concerns
Conversation with Parents

The face-to-face conversation with parents was noticed to dwell on academic or school concern oftentimes. It included issues relating to grades, specific performance in the course program, teachers, course requirements, study habits, school fees, and other school needs. *“She (mother) is also asking about how I am doing in school, my school needs like my books and how I studied my lessons (focus group 2).”* At times, updates on one’s personal life were observed as well as the focus of the conversation. These consisted of themes on one’s social relationships, love life, conflict, crushes, likes or preferences, or any experiences concerning how one’s personal life was. *“She has been asking me also if I have already a boyfriend. I am telling her as well that I have only suitors since they are not allowing me yet to have one (focus group 1).”* Moreover, matters on information and interest were discussed too as a means to promote bonding. This theme had something to do with current events, social controversies, fashion, games, TV series, artist-celebrities, life of others or any topic indirectly associated with one’s life or outside of one’s life. *“When I am with my father, it is about current events or news. He is also opinionated which is why we often argue as we differ in opinions on some issues. But that is seemingly my bonding moments with him (focus group 1).”*

Conversation with Siblings

The most talked about theme in the conversation with the closest sibling was seemingly on issues pertaining to information and interest. Anything that came into their minds or “*anything under the sun*” as what they exactly uttered, like TV shows, movies, gadgets, trends or fashions, and lives of others was readily discussed. *“We also talk a lot with my elder sister about personal matters and all because we seem to jive in almost everything (focus group 3).”* Likewise, updates on personal lives such as crushes, love life, and gossip were included more frequently in the intimate talk and bonding. *“When it comes to my sister, we usually talk about crushes. She also shares with me about her boyfriend especially their quarrels, happiness, and escapades (focus group 2).”* In some instances, issues on academic or school concerns were also conveyed. *"We discuss too about school matters especially that she seems to have neglected her studies. Sometimes, I get annoyed of her because she often wakes up late (focus group 1)."*

Unclear Messages in Face-to-face Conversation
Conversation with Parents

Unclear messages are spoken words or phrases that are not understandable in the midst of the conversation. These are present in some instances if not most of the time. As noted in the conversation with parents, the inclination to ask or inquire right away what the unclear statements were all about was the general behavior. *"My mother often makes me unsatisfied of her statement. For instance when she is interrupted while asking me if I know about something, she would no longer talking about it. When I make a follow-up by asking her what she said a while ago I eventually laugh as she could no longer recall what it was. Sometimes, she seems to easily forget what she said (focus group 3)."* However, when conversations were getting emotionally charged, the tendency to withhold one's doubt was also manifested. *"But when I get offended of her (mother), I tend to withdraw and keep my anger to myself yet remain responsive when asked (focus group 2)."*

Conversation with Siblings

Almost the same pattern of response was observed in their conversation with siblings. Any subject that went unclear was readily discussed further. *"However, when something seems unclear on my part, I tend to force them to give answers and I mostly respond with further questions (focus group 2)."* However, argument or quarrel was also seen to result at times when issues were not taken seriously or withheld intently for the purpose of creating annoyance or humor. *"Sometimes when my sister tells me something or tries to relay a story but my attention is focused on my text messages, TV programs, or my studies, she usually yells at me to get me to listen. But there are times when she grumbles because she seems hurt. That is why I grumble as well that often leads to argument and quarrel. We sometimes spank each other. After which, we often wait who will initiate conversation (focus group 1)."*

Emotionally Charged Face-to-face Conversation
Conversation with Parents

Emotionally charged interactions are face-to-face conversations that involved strong feelings of anger, anxiety, joy, etc. These situations were noted to be dealt with silence and reticence by those who were bent to avoid any forms of reproof. *"I tried to make pretension that I am all okay whenever I am offended of my father's statement. I am also inclined not to show my anger because I feel he has also helped me. When there is anger, I see, to lessen our conversation and minimize the words I express. But I still pretend and continue to conceal my anger (focus group 2)."* However, those who were seen expressive or transparent of their temper were likely inclined to elicit grumbling and argument. *"I am very open and vocal when it comes to feelings. For instance, when I am really angry, I often express it using harsh words or those that hit below the belt. That is really my weakness (focus group 1)."* At times, the tendency to slam things around was also revealed by those who cannot contain their anger when argument was seemingly difficult. *"When I get angry I tend to slam things around. I also tend to ignore her (mother) presence (focus group 2)."*

Conversation with Siblings

Vocal expression of feelings was observed as the usual response when conversation with siblings was charged with anger or irritation. *"We often quarrel harshly with my sister because the manner she responds to my request is really annoying. She tends to be mean and rude in turning down my request. Thus, exchange of grumbling and tirades eventually follows (focus group 1)."* In some instances, the inclination to engage in a physical fight was further manifested by those who were considered hot tempered or intolerant with further annoyance. *"She feels that I am the priority to be given allowance that is why she gets angry with me. She often ignores my presence and throws me a fist, which also provokes me to answer with a fist (focus group 2)."* However, modulated arguments were noted as well in situations where petty quarrels were experienced.

Manner of Virtual Connection with the Family
Family Members Usually Connected With

Conversation by means of the mobile phones or the Internet is also known as online or virtual connection. In this context, the parent, particularly the mother and the sibling whom the participants were usually conversing face-to-face were still observable in the connection loop. *"I usually connect with my mama using my mobile phone to ask for my needs especially when there are things that I need to buy or when there are fees that I need to settle (focus group 3)."* According to Sawhney and Gomez (2000), mothers were the most essential persons with whom to communicate as they seemed central to maintaining the parental and emotional links. It was the mother who provided news and information about others in the family.

However, although almost all connections took place through the use of the mobile phones, the occurrence of connection was also noted to be less frequent. Between the two categories of technology attachment, the functionally attached participants were apparently seen to have minimal virtual connection compared to the structurally attached ones. It somehow coincided with one of the findings of Kennedy, et al., (2008) that only 23 percent of the survey respondents pronounced that Internet and mobile phone had greatly improved their connections with members of their family though they played an important role in keeping in touch with loved ones both near and far. Seemingly, the availability of various technological entertainment features that were mostly exhausting the participants' free time was one of the major factors that affected the frequency of connection. Parents' technological adaptation was also considered a factor. *"I do not have any connections with my mama and dada since they do not know how to use mobile phones (focus group 2)."* Moreover, the network connection preferences and privacy of the siblings were also seen to have contributed to the whole scenario. *"I am connecting very seldom with my younger sister as she uses a Sun Cellular SIM card (focus group 3)."*

Issues or Concerns in Virtual Connection
Virtual Connection with Parents

The virtual connections with parents were noted to contain academic issues that included grades, classes or duty schedules, subject requirements, study habit, etc. *"The text messages I have with mama are only about my studies (focus group 2)."* Update on one's life was also seen as one of the themes which possess situations about how one's life went through especially those who were far from their families *"They are monitoring and asking me always how I am and how my day is. I ask them too how they are because I often get envious of their escapades (focus group 3)."* The previous issues were found as the usually talked about themes of the structurally attached participants.

Financial concerns were observed as well as usual contents of text messages or phone calls just like school fees, allowances, and necessary things to buy. *"He often gets anxious as well when my message requests him to make a call since most of my concerns are all about allowances and other school fees (focus group 1)."* While both categories of technology attachments were noticed to have asked for monetary support in the said means especially by those who were living away from their families, this kind of concern was noticed as the main theme among the functionally attached participants.

Additionally, issues on coordination of household errands or tasks were further observed occasionally. *"She (mother) often sends me text messages about her reminders and errands especially Mary Kay items, which I am often hassled with (focus group 3)."*

All the aforementioned concerns were consistent to the account of Ling (2004) that "parents used the mobile phone to monitor and regulate their teenagers." It was also coherent to the previous result on mobile phone usage reported by Katz and Chen (2009) that the mobile phone was identified as the "most important ICT to keep in touch with parents."

Virtual Connection with Siblings

Issues that were usually found in the virtual connection with siblings were more or less related or continuation of the themes in the face-to-face conversation. It included updates of one's personal life as well as matters concerning interest or entertainment. *"Our topic mostly is about his crushes or his textmates. He often tells me to search the girl in the Facebook especially when he gets refused from online courtship (focus group 2)."* The said themes were mostly observable among the structurally attached than the functionally attached ones. Financial needs were barely noted, too. It was noticed from a single participant whose academic endeavor was regularly supported by her elder sister.

Unclear Messages in the Virtual Connection
Virtual Connection with Parents

Unclear messages in the virtual connection are text messages or phone calls that are found unreadable or unperceivable by the receiver. In the event where parents happened to convey these types of messages, phone call was seen as the usual response by those who claimed impatient with text messaging and had enough phone load for this form of communication. *"I find unclear text messages very hard and irritating as it necessitates longer statements or sometimes paragraphs just to express my thoughts (focus group 1)."* However, inquiries were also made through text messaging by those who admitted to have limited budget. *"I usually ask her to send again the messages or make a call to clarify the message (focus group 3)."* At times, ambiguous messages were merely set aside by those who ran out of mobile phone load or by those who were just seeing their parents at home after their classes. *"Sometimes when I run out of load to send a message or make a call, I rather set it aside until we see each other at home (focus group 1).*

The difference between the categories of attachment was not really distinctive. Both were noticed to elicit either or a combination of the said responses. Additionally, unclear statements in the midst of phone call were either responded with further questions that often lengthened the talk or elicit instant approval to make the discussion shorter though the message was not really well understood. *"I often say okay even when I am not getting the messages. I am led to say yes or to affirm what was told (focus group 3)."* Wallace (1999) pointed out that there was "high likelihood of both misunderstandings and disproportionate responses in the virtual connection due to the lack of visual and verbal cues to situate utterances." "Insofar as relying on indirect communication, ambiguity is always a problem for improving personal relationships" (Igarashi, Motoyoshi, Takai, & Yoshida, 2008).

Virtual Connection with Siblings

While the virtual connection with a sibling was noted to be less frequent compared to that of the parents, the unclear messages were still dealt with in more or less similar manner. Immediate answers or clarification were often sought through making phone calls by those who prefer phone calls. "*That is why I see to it that my Sun Cellular SIM is loaded with one month unlimited calls so as to readily respond to unclear text messages. I mostly prefer making calls (focus group 1).* "However, text messaging was generally seen as the most accessible means to inquire unclear issues by all mobile phone users. *"I simply ask to repeat the message when it appears unclear (focus group 3).* "Even those who prefer phone calls had also experience text messaging in making inquiries to their siblings especially when connections were clouded with emotions. Moreover, no particular pattern of response was observed that was mainly associated with either of the technology attachment categories.

Emotionally Charged Messages in the Virtual Connection
Virtual Connection with Parents

Emotionally charged messages in the virtual world are text messages or phone calls that convey annoyance, anger, disappointment, happiness, etc. to the receiver in the mobile phone or computer. Generally, feelings are evident if not physically visible in relating to each one in the family. In situations where connections with parents were emotionally charged, vocal expression of feelings in phone call was seemingly experienced by those who prefer phone calls and by those who can openly express their feelings in the face-to-face conversation. Phone call users were observed to have acknowledged that feelings were difficult to express in text messages.*"It is really different in text messaging as feelings are not totally expressed unlike in face-to-face conversation. It is making you lazy as well to compose text messages. There is also a tendency that you will be misunderstood (focus group 1).*" However, text messaging was generally noted as the usual means to express one's feelings in the virtual world. Such practice was seemingly helpful when direct confrontations either through phone call or face-to-face talk were seemingly difficult or too heavy to do. It was seen as well as the only way to purge out resentment or anger according to a few participants. *"I tend to do it in a nice way that my mother does not get hurt. Though I never place exclamation marks or periods in my text messages, she seemingly knows how I feel (focus group 2)."* Castells, Fernandez-Ardevol, Qiu, & Sey, (2007) reported that since the mobile phones were instrumental in negotiating boundaries with their parents, better parent-children relationships were fostered.

It was further observed from those who were inclined to avoid tension, hurting or annoying messages were simply ignored or discarded. *"I don't express anger even through text messages because I'm afraid how mama gets angry when she is offended (focus group 3)."* Troubles were shunned as well by responding safe and uncharged messages though unpleasant feelings were also noticed to have elicited the same response for the purpose of expressing resentment. *"But she can feel my resentments just like when she took back my ATM. I did not reply right away when she monitored me if I was already in my dormitory. I wanted to make her worried because of what she did (focus group 3)."* The aforementioned responses are apparently seen in the studies of Green (2001) and Ling (2004) that teenagers were avoiding the connection of their parents by refusing to answer their mobile phones or by not telling the truth. Koopoma (2000) also testified that the mobile phone allowed the teenagers to get connected.

Moreover, expression of positive and happy feelings towards the parents was generally awkward to do. There was an instance after the annual recollection where everyone was encouraged to say "I love you" to their parents. Since such text message was unusual in the virtual connection, parents were reportedly amazed as they elicited replies. *"I only had such message because I'm not showy to them of my feelings. Besides, I'm not used to do it. I know that I love them but I really feel shy and yucky to talk about it (focus group 3)."*

Virtual Connection with Siblings

Taking into account how emotions were expressed in the context of virtual connection with siblings, vocal expression of feelings in phone calls was consistently elicited by those who prefer phone calls. But text messaging was manifested as the widely used means to convey not only annoyance or anger but appreciation or joy as well. *"Though I also use smiley, clips and graphics that convey feelings like typing the word 'Ngrrr' when angry, I still find them inadequate (focus group1."* Igarashi, et al. (2008) noted that "emoticons and paralanguages are other useful ways for expressing senders' feelings in text messages." However, being resentful when irritated or reservation of feelings for a seemingly vindictive face-to-face argument was also seen in rare instances.

The social meaning of the mobile phone and the Internet was found to be influenced by type technology attachment the college students have formed. In the point of view of the functionally attached participants, these ICTs were merely considered utility devices for important social, relational and academic responsibilities. On the other hand, the said instrumental functions were seen basic needs in the construct of the structurally attached participants. As connection with significant others and access to the reservoir of information were eventually emanated through the existence of the virtual world and were along the way assimilated into the habit and lifestyle, the aforementioned technologies were seen inseparable in day-to-day living. Likewise, emotional attachment was further noted as a bond that held the mobile phone and Internet more valuable in daily routines. The presence of these technological devices was observed to project the spirit of significant others and at the same time the technologies' interactive features were seen to reciprocate a feeling of comfort and relief. Thus, unpleasant emotional responses were exhibited in its absence.

The whole scenario apparently suggests a path of social construction. There was expansion or shift of the purpose or uses of the mobile phone and Internet as shaped by the influential social groups or communities where the focus groups participants were associated with (Bruun & Hukkinen, 2003). Similarly, Gergen (2008) pointed out that the meaning or functions of technology are eventually made or though relationships or interaction of different people.

While the functionally attached and the structurally attached participants did not reveal clear distinction in the face-to-face conversation and in the virtual connection with their respective families, the entire phenomenon is construed to have led significant changes in the family communication and family relationship. The mobile phone and Internet have indeed facilitated fusional relationship (as cited in Peters & Allouch, 2005), stronger intimacy (as cited in Chen & Katz, 2009) and global and local interaction and linkages (Horrigan, Rainie, & Fox, 2001). Kennedy et al. (2008) also viewed both technologies as useful means in expanding the face-to-face conversation to the virtual connections with family members and as "positive tools for improving the quality of communication with family members," particularly those who are living away from home.

Additionally, getting specific into the mobile phone, it was cited as the most accessible and widely used technology to obtain and share personal updates in life and academic status. According to Leena, Tomi, and Arjab, (2005), access to the mobile phone is a "vital necessity among the young people and a portable gadget for survival in the modern world." It was also noted to be very instrumental in expressing personal sentiments. Through text messaging, feelings that were held behind in the face-to-face conversation with families especially towards the parents were eventually conveyed indirectly. This is consistent with the findings of Igarashi, et al. (2005) that adolescents were inclined to prefer the indirect communication through text messaging so that obstacles in the face-to-face situation are moderated. On the other hand, the Internet was mostly useful for research on academic matters and entertainment and establishing a virtual connection with friends and classmates or any person outside the family through Facebook and other chat engines. Piazza and Bering (2009) also confirmed in their study that most of the young people are using the Internet to socialize with their current friends, make new friends, share photos and videos, and disclose personal thoughts.

However, irrespective of the technology attachment categories, the virtual connections with parents and siblings were generally infrequent. It somehow coincided with one of the findings of Kennedy, et al. (2008) that only 23 percent of the survey respondents pronounced that the Internet and the mobile phone had greatly improved their connections with members of their family.

Nearness of family members was also noticed to have affected the virtual connection. Participants who were seeing their parents after school activities were inclined not to elicit immediate or further messages replies. This finding was reported too in the study of Mesch (2009), that individuals residing in proximity to their contact and individuals who perceived their relationship as close deemed more likely to communicate face to face.

Moreover, ICTs have also perpetuated communication drawback that are manifested in the form of communicative barrier between the caller and the others who are physically near (Pearson, 2001), "absent presence," in which individual's presence became unavailable for others (Gergen, 2002a), contraction in the size of an individual's social network (Kraut, Paterson, Lundmark, Kiesler, Mukopadhay, & Scherlis, 1998), isolation and reduction of time spent with significant others brought by the time spent online (Nie & Erbing, 2002).

Most importantly too much attachment to the virtual world is seen to undermine the original, coherent and natural relationships in the family where the true foundation of self and identity (Gergen, 2000) originates. The family as a basic social institution is eventually becoming less influential. Within the family, each member is increasingly owning mobile phones and seeking constant access to the Internet or to the virtual world. Consequently, "geographic propinquity now means little and each member lives a psychologically separated life" (Gergen, 2002b).

In the virtual world where connection and sources of meaning are increased or expanded, social relationship becomes superficial as details of contact and exploration of deeper feeling are made unavailable or less accurate (Gergen, 2002b). Each virtual connection is well bringing new information, opinion, and values into play (Gergen, 2000) that are posing king of individual identity that is fluid where each user is led to make immediate shift from one form of response to another like a chameleon (Gergen, 2002b). Fluid identity is then suggesting a polyvocal type of self that contains multiple views and values that are often conflicting (Gergen, 2000) and confusing. To that effect, the inner self that is supposedly grounded on the family values in making appropriate decisions and choices is led at the footloose and is easily allured to adhere to the popular and practical notions of others in the virtual world that often negates the foundation of the moral self and purpose. Thus, considerable threat is manifested to the formation of "integral and authentic" self (Gergen, 2000) that is purportedly rooted in traditional families and communities.

As the individual self is understood in the context of their family as they are a fraction of the family system, new thoughts and habits they espouse are as well seen to affect the dynamics and nature of the family (Corey, 2005). In this light, the individual self who holds on and assimilates more the notions and the contradicting values of influential media in the virtual world diminishes the chance and opportunity of their family to impart values and formation. In other words, as the family influence and formative role decline, the natural family relationship breaks. As a result, the family loses its grip on the individual self, thereby making the child difficult to understand and form.

As the virtual world of ICT continues to penetrate every household, the foresight of the entire phenomenon can be viewed as a lens by the different formators of the individual self. Parents in particular are seen to have strong authority to exercise caution in the usage of the mobile phone and Internet. There can be effective ways to regulate the usage technically or behaviorally. However, there is no substitute for the family rituals where the entire family frequently spends time together. This scenario is usually exercised and maintained during mealtime, every time casual conversation to any family member pops out, and when household chores are at hand, or when opportunity is seen for outdoor activities and fun. Not even the virtual connection with the family members can replace them. Face-to-face communication, interaction and togetherness can always be path towards sharing personal lives, understanding, and most importantly formation of individual self. An individual self that is founded in accordance with the family values and moral purpose can likely withstand storm of influences posed by various institutions or prominent personalities in the virtual world. Teachers or even school personnel as well are considered **formators** of the individual self. Simple rules in the classroom or inside the school campus can be helpful ways to regulate the usage. The school personnel can even create Internet filters to restrict the access of inappropriate websites. However, school activities that lessen or discourage online indulgence are seemingly better alternative. The different support services of the school can recreate its program to answer this concern. Most of all, the students themselves who are subject of the family values formation should take caution from time-to-time of the information they have browsed online. While they are encouraged to be critical in terms of values and moral purpose, they are urged as well to lessen or minimize their online indulgence in favor of studies, family rituals, school or church activities.

While the results and discussion of the study may be used to confirm the results of the current researches on the usage of mobile phone and Internet, the degree to which the finding can be generalized is limited due to its sample size. However, the results may be counted as one of the initial findings of which further quantitative researches can be directed. Quantitative studies on the usage and meaning of mobile phone and Internet can eventually establish general profiles for various populations of students for policy and school program formulation or intervention.

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ASSESSMENT OF THE MANAGEMENT INFORMATION SYSTEM IN THE MEDICAL SERVICE OF A PROVINCIAL HOSPITAL

Harris D. Macapeges, M.D., FICS, FPAMS, MAHA

The study aimed to determine the current state of the management information system in a provincial hospital. It focused on determining the status of the hospital information processes, quality of the information processes, and the problems encountered in the seven departments of medical services. Moreover, it determined the significant difference in the quality of information services among the seven sections in the medical service. This research was primarily a descriptive assessment institutional study which used both qualitative and quantitative data. Universal sampling was used to include the 40 medical personnel. Results showed that all the seven sections were moderately efficient in so far as the eight hospital information processes are concerned. In terms of accuracy, completeness and adequacy, the out-patient section was rated very good *while the other six sections were rated* good *in implementing the eight hospital information processes. The quality of timeliness of the records section was* poor *but the other sections were considered* good*. There were varied and numerous problems with the current information processes system of the hospital categorized into hospital information processes and other related problems such as facilities, funds, system, training and the people (patients and staff). There was a significant difference in the quality of information services in the different dimensions of medical services.* ***Results highlighted implications for adopting an integrated hospital information system.***

Introduction

An effective information system is a vital component of quality health service delivery system. Adequate, updated and technically sound information is a prerequisite to effectively meet health issues and concerns. In this light, all efforts should be exerted to ensure that data are managed well at all levels. This encompasses activities to ensure proper data collection, recording, reporting, analysis, interpretation and utilization, feedbacking and data dissemination.

Walsh and Simonet (1995) posited that health information is required for strategic planning as well as for setting priorities. They emphasized the importance of having quality health information to ensure quality assurance and quality improvement for an efficient health service delivery, human resource management, in program evaluation and management and research. Community members also need quality information to enable them to choose health enhancing behaviors.

The World Health Organization (WHO) in 2006 argues that investment in health management information systems (HMIS) now could reap, in the future, multiple benefits such as helping decision makers detect and control emerging and endemic health problems, monitor progress towards health goals, and promote equity. It also strengthens the evidence base for effective health policies, permitting evaluation of scale-up efforts, and enabling innovation through research. Furthermore, the WHO stressed the empowerment of individuals and communities through timely and understandable health related information and drive improvements in quality of services thus improving governance, mobilizing new resources, and ensuring accountability in the way information is used.

In the Philippines, government hospital facilities have the Hospital Statistical Reporting System. This report is submitted annually to the Department of Health (DOH) Central Office through the provincial health offices and regional health offices. The reports include the number of admissions, bed occupancy rate, leading causes of admission and discharges, number and types of surgical operations performed, leading causes of mortality and the number of consultations per type of service.

This study is aimed to contribute towards the overall enhancement of the current HMIS. For the hospital staff, the study may help them determine the present status of the hospital information system

(HIS), thus allow them to identify gaps currently affecting the quality of the HIS. Administrators will also be able to identify specific barriers and enhancers towards a more functional information system.

For the hospital staff directly involved in the information system, useful information gathered as a result of this study, is hoped to inspire them towards improved performance of their duties and ensure the quality of services they render to clients. For hospital managers, the inputs on information system will provide them reliable basis for decision making. The results of this study can also be useful in crafting a plan of action to resolve specific issues and concerns currently affecting the hospital.

The study might be helpful to other government hospital managers who find themselves in the same situation. It is hoped that the study would also contribute useful data for information system research. The data revealed in this study may be added to the bank of knowledge and information already existing on factors affecting the quality of hospital information system.

Theoretical/ Conceptual Framework

The theoretical underpinnings of this study emanated from current trends in the health information system and systems theory. These two were deemed appropriate in directing the structure and format of this investigation.

A health information system is a process whereby health data (input) are recorded, stored, retrieved and processed for decision-making purposes (output). Any information system has three parts: inputs, processes, and outputs. It integrates the data gathering system that serves the total operations and management of the organization. Decision making broadly includes managerial aspects such as planning, organizing and control of health care facilities at the national, regional and institution levels; and clinical aspects which can be subdivided into (i) providing optimal patient care, (ii) training of medical personnel to generate appropriate human resources, and (iii) facilitate research and development activities in various fields of medicine. All basic information needs of the organization are interrelated through a common database.

The system approach to management views the organization as a unified, purposeful system composed of interrelated parts. It provides managers a way to look at the organization as a whole (as cited in Leveriza, 1986). It shows that the activity of any part of the hospital affects the activity of all other parts.

The Systems Model is based on the core principle that input is processed into output and fed back to the input. It is a complete process where each and every stage is important and contributes to the overall improvement of the system.

Figure 1 illustrates the Input Process Output (IPO) of the HIS. The input includes the status of specific areas of concern such as recording, filing/ data banking, flow/submission of reports, data analysis, data utilization, feed backing, and data dissemination. The output or the key results will include the quality of HIS such as accuracy, completeness, adequacy, and timeliness.

INPUT

Status as to Specific Areas of Concern

- Recording
- Filing/ data banking
- Flow/submission of Reports
- Data Analysis
- Data Utilization
- Feed backing
- Data Dissemination

PROCESS

- Information recorded
- Information stored
- Records retrieved
- Information processed
- Prompt/Late submission of information
- Accurate/inaccurate information
- Prompt/Late feedbacking
- Used/Unused Data
- Full/No Data dissemination

OUTPUT

Quality of Hospital Information System

- Accuracy
- Completeness
- Adequacy
- Timeliness

Figure 1. Conceptual Framework for Input Process Output

Methods

This is a descriptive assessment institutional study that used both qualitative and quantitative data to arrive at the answers to the research questions. The study focused on a provincial hospital, which is a fifty-bed capacity health facility that renders 24-hour daily services to thirteen municipalities and its nearby municipalities. Doctors, nurses and other hospital staff in each section are available during their duty hours to attend to all patients currently admitted in the hospital. Unlike the hospitals in nearby province, the provincial hospital is under the administrative control of the autonomous regional government through the Department of Health (DOH). As a non-devolved agency, the hospital operates within the meager budget allocation from the national government through the autonomous regional government and DOH with the support of the provincial government, local government units, national agencies, local, national, and foreign donors.

Respondents for this study included all the key officials in medical services and some selected personnel of the provincial hospital directly involved in the HIS and in health service delivery. The end users of the data assessed the quality of the HIS. The study used universal sampling in choosing the respondents of the study. There was a total of forty respondents, chosen on the basis of their knowledge of the information desired.

A survey questionnaire was utilized. Part 1 focused on the assessment of the status of the HIS in terms of the degree of efficiency on the areas of collection, collation (filing and data banking), recording, processing, data analysis, data utilization, feedbacking and data dissemination. The assessment used the rating scale with 1 as not efficient (NE), which means it needs improvement or no information was complied with; 2 is described as moderately efficient (ME), which means that some information was complied with; and 3 is described as very efficient (VE), which means that all information were complied with. The second part focused on the assessment of the quality of data being generated in the provincial hospital statistical report in terms of accuracy, adequacy, completeness and timeliness. The assessment rating was scaled into three, namely, (1) poor, (2) good, and (3) very good. The instrument was validated by experts to establish its reliability, and pilot tested in a similar hospital to establish its validity.

The researcher coordinated with the provincial hospital officials for permission to conduct the study. The response was favorable so an endorsement letter was forwarded to the respondents of the study. The schedule of data collection was drafted relative to specific respondents. The questionnaire was then distributed to the respondents. Collected information were recorded, tabulated and analyzed. Interpretation and conclusions were drawn from the findings and recommendations were made using these findings as bases. Frequency and percentage, as well as weighted mean and analysis of variance (ANOVA) were used as statistical treatment.

Results and Discussions

Table 1 shows the status of the hospital information processes in the different clinical and records services of the seven sections of medical services in the provincial hospital. All the seven sections are *moderately efficient* in terms of recording/listing/filling-up forms, data processing, data analysis, data utilization, feedbacking, and data dissemination. Out of the seven sections, only the outpatient department is rated *very efficient* with a rating of 3.00 in terms of submission of reports.

Table 1. Status of the Hospital Information Processes in the Seven Departments of Medical Services

Areas of Concern	Emergency Room		Outpatient Section		Clinical Ward		Operating/ Delivery Room		Laboratory Section		Radiology Section		Records Section	
	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI
1. Recording/ listing/filling-up forms	2.22	ME	2.00	ME	2.09	ME	2.00	ME	2.20	ME	2.33	ME	2.00	ME

2. Filing forms/ records or data banking	2.20	ME	1.00	NE	2.18	ME	2.00	ME	2.00	ME	2.33	ME	2.00	ME
3. Data Processing	2.10	ME	2.00	ME	2.00	ME	2.00	ME	2.40	ME	2.00	ME	2.00	ME
4. Data Analysis	1.70	ME	2.00	ME	2.00	ME	2.00	ME	2.40	ME	2.00	ME	2.00	ME
5.Submission of Reports	2.20	ME	3.00	VE	2.09	ME	2.00	ME	2.20	ME	2.00	ME	2.00	ME
6. Data Utilization	1.70	ME	2.00	ME	2.10	ME	2.00	ME	2.20	ME	2.00	ME	2.00	ME
7. Feedbacking	1.70	ME	2.00	ME	1.91	ME	2.00	ME	2.20	ME	2.00	ME	2.00	ME
8.Data Dissemination	1.60	ME	2.00	ME	1.90	ME	2.00	ME	2.40	ME	2.00	ME	2.00	ME
Overall Mean	**1.93**	**ME**	**2.00**	**ME**	**2.03**	**ME**	**2.00**	**ME**	**2.25**	**ME**	**2.08**	**ME**	**2.00**	**ME**

**WM-Weighted Mean; DI- Descriptive Interpretation; ME-Moderately Efficient*

The precise or exact accuracy or quality of the information is presented in Table 2. The overall result shows that the outpatient section is rated *very good* in terms of accuracy as revealed by the mean of 3.00.

Table 2. Quality of Information Services According to Accuracy

Areas of Concern	Emergency Room		Outpatient Section		Clinical Ward		Operating/ Delivery Room		Laboratory Section		Radiology Section		Records Section	
	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI
1. Recording/listing /filling-up forms	2.00	G			1.91	G	1.67	G	2.20	G	2.00	G	1.80	G
2. Filing forms/ records or data banking	2.00	G	3.00	VG	2.00	G	1.67	G	2.60	VG	2.00	G	1.60	G
3. Data Processing	1.90	G			1.91	G	1.67	G	2.00	G	2.00	G	1.80	G
4. Data Analysis	1.90	G			2.00	G	1.67	G	2.20	G	2.33	G	1.60	G

5. Submission of Reports	1.70	G			1.82	G	1.33	P	2.20	G	2.00	G	1.80	G
6. Data Utilization	1.70	G			1.73	G	1.33	P	2.00	G	2.00	G	1.80	G
7. Feedbacking	1.80	G			1.55	G	1.33	P	2.20	G	2.00	G	1.80	G
8.Data Dissemination	1.70	G			1.82	G	1.33	P	2.00	G	2.00	G	1.80	G
Overall Mean	**1.84**	**G**	**3.00**	**VG**	**1.84**	**G**	**1.50**	**G**	**2.18**	**G**	**2.04**	**G**	**1.75**	**G**

**WM-Weighted Mean; DI- Descriptive Interpretation; VG-Very Good; G-Good; P-Poor*

Table 3 presents the quality of information services in terms of completeness. The overall result shows that only the outpatient section is *very good* in terms of completeness and the other six sections are rated *good* by the respondents.

Table 3. Quality of Information Services According to Completeness

Areas of Concern	Emergency Room		Outpatient Section		Clinical Ward		Operating/ Delivery Room		Laboratory Section		Radiology Section		Records Section	
	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI
1. Recording/listing /filling-up forms	2.00	G	3.00	VG	1.82	G	1.67	G	2.20	G	2.00	G	1.40	P
2. Filing forms/ records or data banking	1.90	G			1.64	G	1.67	G	2.20	G	3.00	VG	1.80	G
3. Data Processing	1.90	G	3.00	VG	2.00	G	1.67	G	2.00	G	2.00	G	1.80	G
4. Data Analysis	2.00	G	3.00	VG	2.00	G	1.67	G	2.40	G	2.33	G	1.60	G
5. Submission of Reports	1.90	G	3.00	VG	1.82	G	1.33	P	2.20	G	2.00	G	1.60	G
6. Data Utilization	1.70	G			1.82	G	1.33	P	2.00	G	2.00	G	1.80	G
7. Feedbacking	1.80	G	3.00	VG	1.55	G	1.33	P	2.00	G	2.00	G	1.80	G

8.Data Dissemination	1.50	G	3.00	VG	1.82	G	1.33	P	2.00	G	2.00	G	1.80	G
Overall Mean	**1.84**	**G**	**3.00**	**VG**	**1.81**	**G**	**1.50**	**G**	**2.13**	**G**	**2.17**	**G**	**1.70**	**G**

**WM-Weighted Mean; DI- Descriptive Interpretation; VG-Very Good; G-Good; P-Poor*

In terms of overall results, the six sections, namely emergency room (ER), clinical ward, operating/delivery room, laboratory section, radiology and records section, obtained a *good* rating in all the hospital information processes. However, there is no section that obtained a *very good* rating in terms of adequacy of hospital services. The records section showed a *poor* rating of 1.25 on data analysis (Table 4).

Table 4. Quality of Information Services According to Adequacy

Areas of Concern	Emergency Room		Outpatient Section		Clinical Ward		Operating/ Delivery Room		Laboratory Section		Radiology Section		Records Section	
	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI
1. Recording/ listing/filling-up forms	2.00	G	3.0	VG	1.82	G	1.67	G	2.20	G	2.00	G	1.75	G
2. Filing forms/ records or data banking	2.00	G	3.0	VG	1.73	G	1.67	G	2.20	G	2.00	G	1.75	G
3. Data Processing	2.00	G	3.0	VG	1.91	G	1.67	G	2.00	G	2.00	G	1.75	G
4. Data Analysis	2.00	G	3.0	VG	2.00	G	1.67	G	2.00	G	2.00	G	1.25	P
5. Submission of Reports	1.90	G	3.0	VG	1.82	G	1.33	P	2.20	G	2.00	G	1.50	G
6. Data Utilization	1.80	G	Item not rated	-	1.82	G	1.33	P	2.00	G	2.00	G	1.75	G
7. Feedbacking	1.90	G	3.0	VG	1.55	G	1.33	P	2.00	G	2.00	G	1.75	G
8.Data Dissemination	1.90	G	3.0	VG	1.73	G	1.33	P	2.00	G	2.00	G	1.50	G
Overall Mean	**1.94**	**G**	**3.0**	**VG**	**1.80**	**G**	**1.50**	**G**	**2.08**	**G**	**2.00**	**G**	**1.63**	**G**

WM-Weighted Mean; DI- Descriptive Interpretation; VG-Very Good; G-Good; P-Poor

Table 5 shows the quality of information services according to timeliness. The respondents of the outpatient section did not rate all the indicators of hospital information processes. In terms of overall results, five sections namely, ER, clinical ward, operating/delivery room, laboratory section, and radiology section obtain a *good* rating in all the hospital information processes. However, the records section, with an overall result of 1.41 is *poor* in terms of timeliness of their quality services.

Data show varied and numerous problems currently existing in the information processes system of the provincial hospital. The problems are categorized into (1) hospital information processes such as collection, recording, processing, feedbacking; and (2) related problems such as facilities, funds, system, training and the people (patients, staff).

Table 5. Quality of Information Services According to Timeliness

Areas of Concern	Emergency Room		Outpatient Section		Clinical Ward		Operating/ Delivery Room		Laboratory Section		Radiology Section		Records Section	
	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI	WM	DI
1. Recording/ listing/filling-up forms	1.90	G	2.0	G	1.91	G	1.67	G	2.40	G	2.33	G	1.00	P
2. Filing forms/ records or data banking	1.90	G	2.0	G	1.91	G	1.67	G	2.40	G	2.33	G	1.50	G
3. Data Processing	1.70	G	2.7	VG	1.91	G	1.67	G	2.00	G	2.00	G	1.75	G
4. Data Analysis	1.90	G	3.0	VG	2.00	G	1.67	G	2.40	G	2.00	G	1.00	P
5. Submission of Reports	1.70	G	3.0	VG	1.82	G	1.33	P	2.20	G	2.00	G	1.50	G
6. Data Utilization	1.80	G	Item not rated	-	1.82	G	1.33	P	2.00	G	2.00	G	1.75	G
7. Feedbacking	1.90	G	3.0	VG	1.55	G	1.33	P	2.00	G	2.00	G	1.50	G
8.Data Dissemination	1.80	G	3.0	VG	1.73	G	1.33	P	2.00	G	2.00	G	1.25	P
Overall Mean	**1.83**	**G**	**2.3**	**G**	**1.83**	**G**	**1.50**	**G**	**2.18**	**G**	**2.08**	**G**	**1.41**	**P**

WM-Weighted Mean; DI- Descriptive Interpretation; VG-Very Good; G-Good; P-Poor

Table 6 shows the significant difference in the Quality of Information Services among the clinical and records sections. The computed *f* value is 8.342 for the quality area on accuracy, the *p* value being lesser than the 0.05 level of significance, thus rejecting the null hypothesis. This means that there is a significant difference in the quality of information services on accuracy among the different clinical and records services.

The significant difference in the quality of information services among the different clinical and records services in terms of completeness is also presented. The data provides a computed *f* value of 9.454. The *p* value is lower than the 0.05 level of significance, thus, the null hypothesis is rejected which means that there is a significant difference in the quality of information services on completeness among the different clinical and records sections.

The computed *f* value for the quality area on adequacy is 2.716, which shows significant differences in the quality of information services on adequacy among the different clinical and records sections. Likewise, the computed *f* value of timeliness quality area is 3.536, which also shows significant differences in the quality of information services on timeliness among the seven medical service departments' different clinical and records sections.

Table 6. Test on the Significance in the Difference in the Quality of Information Services in the Seven Sections in the Medical Services

Quality of Information Services	*f* value	*p* value	Decision	Interpretation
Accuracy	8.342	.000	Reject Ho	Significant
Completeness	9.454	.000	Reject Ho	Significant
Adequacy	2.716	.039	Reject Ho	Significant
Timeliness	3.536	.012	Reject Ho	Significant

**0.05 level of significance*

All the seven sections in the provincial hospital were *moderately efficient* insofar as hospital information processes were concerned, except for the outpatient department (OPD) that was rated very efficient in terms of submission of reports. The said rating was attributed to the staff having more time to prepare reports as they render service up to 4 p.m., unlike the other services, which offer 24-hour duty for most days of the week. Their best practice is the ability of the staff to gather and process data and keep the records on or before the closing time.

The other six sections were *moderately efficient* in all the hospital information processes. On the other hand, the outpatient section was rated *not efficient* as shown in the 1.00 rating in terms of filing forms/ records or data banking. The filing system of the outpatient section of the provincial hospital seemed inefficient because there are lots of records that are misplaced, even lost, especially records of patients who insist on being attended to after 4 p.m. when OPD personnel are not on duty anymore. Patients at that time are entertained and treated in the emergency room. Usually, records are not properly endorsed to the OPD personnel the following day by ER personnel.

Duran-Arenas, Rivero, Canton, Rodriguez, Franco, et al. (1998) affirmed the need for a facility to be flexible and capable of adapting to local needs while at the same time allowing for standardization of health care quality assurance indicators and subsequent ability to measure and compare the quality performance of health facilities. However, a principal barrier to improving service quality in many health care facilities is the lack of reliable systems for managing and retrieving individual patient records. Most service statistics subsystems track data only from public sector providers and facilities. Future improvements must implement systems to ensure reporting of service data from the private sector. This challenges the areas in the provincial hospital to improve their sections that are not efficient and to continue the best practices of sections delivering very efficient services.

Out of the eight information processes, only filling in forms/ records or data banking was rated. The other processes were not rated and this was due to insufficient information provided that eluded rating them. In terms of accuracy, the outpatient section is very good in filling in records as long as they are endorsed correctly to them, especially those who sought consultation as an OPD case in the ER. The staff had its system of filing all the records they had gathered. Their only problem was charts that were misplaced or even lost in transition. The data also show that the other six sections, namely, ER, clinical ward, operating/delivery room, laboratory section, radiology and records section are good in implementing the eight hospital information processes.

The operating/delivery room obtained a poor rating on the hospital information processes, including the submission of reports, data utilization, feedbacking, and data dissemination. This attributed to the inability of this facility to operate on a regular basis, with no regular personnel assigned to it, especially after office hours and on weekends, thus some surgical procedures done were not properly recorded, seemed logical. No medical personnel like an anesthesiologist were assigned to properly manage the operating room, much less keeping the records. There was no regular schedule for elective surgical operations. Some information was not properly filled up in required forms, especially on emergency cases at night.

The overall results show that only the outpatient section is very good in terms of completeness, and the other six sections are rated good. But in this section not all the information services were rated. The respondents did not rate the process of filling-in forms/ records or data banking and data utilization. But the information processes were all rated very good in terms of completeness. The outpatient section personnel included only those records on their files and did not mention the records that were misplaced and lost.

Table 3 also presented three sections: the ER, clinical ward, and laboratory section were good in implementing completeness of information in the eight hospital information processes. The radiology department obtained a very good rating in filling in forms/ records or data banking. In radiology section, all patients who would undergo radiological procedures must be recorded in the log book provided with complete data, procedures done to include radiologic diagnosis carefully provided in the logbook. Reports were routinely done and monitored by the central and regional office for accreditation and renewal of license to operate. They must strictly follow the rules and regulation in submitting their reports properly to the said offices, otherwise accreditation and renewal of license might not be granted.

The records section was rated poor in terms of completeness in recording/listing/filling-up forms because charts were not properly and regularly collected. It takes several days for the physician-in-charge to complete the required charts. Other charts or records are kept by some physicians and other personnel for several days before they are returned to the records section. Incomplete charts and records for completion are not also routinely delivered to the one in charge. Furthermore, the operating/ delivery room obtained poor rating on the completeness of hospital information processes such as submission of reports, data utilization, feedbacking, and data dissemination. This poor rating could be due to operational capacity, records are not properly obtained and not properly kept and no standard rules and regulations are followed in the operating room.

In terms of overall results, the six sections, namely, ER, clinical ward, operating/delivery room, laboratory section, radiology and records section obtained a good rating in all the hospital information processes. However, no section obtained a very good rating in terms of adequacy of hospital services. The records section was rated poor on data analysis. On the other hand, the operating/delivery room obtained a poor rating in terms of adequacy on the hospital information processes which are submission of reports, data utilization, feedbacking, and data dissemination. Operating room reports, cases and procedures are not updated. Standard operating room policies are not followed due to incomplete guidelines on proper use of the operating room and facilities.

In terms of timeliness as a quality of information services, the respondents of the outpatient section did not rate all the indicators of hospital information processes. The outpatient section, which render services during the office hours only, does not have a problem in terms of timeliness because they have more time to gather and fix their records accordingly than the other sections. In terms of overall results, five sections, namely, ER, clinical ward, operating/delivery room, laboratory section, and radiology section that were rated good by the respondents in all the hospital information processes. However, the records section obtained an overall rating of poor in terms of timeliness of their quality services. There was no section which obtained a very good rating in terms of timeliness of hospital services. Four services—the ER, clinical ward, laboratory, and radiology, were given a good rating in all the hospital processes.

The records section was rated poor on timeliness of services in the following information processes: recording/ listing/ filling up forms, data analysis, and data dissemination. The records section is rated poor in terms of timeliness due to poor handling of records for completion and submission. Some personnel like doctors do not report regularly for work. Charts and records are not properly accomplished even after the doctors made the rounds. The records section has no means of following up the person in charge for compliance once they go off-duty. They had to wait for the next tour of duty, which is seven days or more, for them to comply with incomplete charts or records.

On the other hand, the operating/ delivery room obtained poor rating in terms of timeliness on the hospital information processes such as submission of reports, data utilization, feedbacking, and data dissemination. Due to lack of human resources, the operating room staff performs dual functions, thus, records are not properly managed and not regularly monitored by the hospital. Other cases are not recorded and reported on time.

Stansfield, Prata, Walsh and Evans (2005) contended that collection, collation, analysis and communication on the necessary information in a timely and understandable fashion require organized processes and procedures and a comprehensive HIS. Information dissemination in the provincial hospital obviously needs improvement to make its services satisfying to their clients.

The problems encountered in the current system of reporting are varied and numerous considering the state of the information processes system of the provincial hospital. On collection of records, both the emergency and laboratory sections of the hospital identified the incomplete data given by the client aggravated by the personnel's neglect in completing the patients' data as problems encountered in the current system of reporting. On recording, the hospital report's emergency and laboratory section reported no systematic keeping of patients' records; data were not encoded in the computer, pointing to the need to update the system of filing records, preferably electronically. On data processing, the ER and clinical ward problems include the need for a computer for easy keeping and retrieving of records. The outpatient section reported that it was much better to have a computer because some patients forget their file numbers, making it difficult to locate records. On feedbacking, the ER identified the absence of mortality and morbidity review and no case presentation as to problems encountered in the current system of reporting. On facilities, four sections of the hospital such as the ER, clinical ward, laboratory and record sections, mentioned the lack of high technology facilities such as computer units while the ER added lack of funds, lack of a workable system for hospital, orientation regarding workable/effective information system and a non-departmentalized information system, politics and poor maintenance, as the problems encountered with current reporting. The clinical ward reported consistency of strictly implementing hospital rules and regulations that all the employees should comply. It was systematic but still needed improvement in the reporting system of the laboratory section of the hospital, which was mentioned as a problem. Poor training of recording staff and lack of a continuing education of all staff especially the new ones were mentioned as problems as well. With regards to time management, no guidelines were available for the staff to follow; and health education and teaching were insufficient. Some problems encountered related to reporting were illiterate clients/patients; uncooperative patients or watchers with low educational attainment; lack of information provided to the patients regarding proper/ accurate ways of disease prevention; and occasionally hostile informants. A chief of staff who was not available, accounted for the communication gap between the administration of the hospital and the staff, as well as attitude problems towards work, were some concerns the hospital faced. The difference in the quality of information services of the different clinical and records services of the hospital based on quality, timeliness, accuracy, and adequacy are significant.

The outpatient section was rated very good because it was able to deliver accurate and complete services, whereas the other six departments were rated good in their service delivery. According to Loevinsohn (1994) timely, accurate and relevant information is a prerequisite to making good decisions on effective policies and services. Health information was required for strategic planning and for setting priorities. It went without saying that accurate information processing would benefit the clients of the provincial hospital.

There was a significant difference in the quality of information services on adequacy among the different clinical and records sections of the seven departments in medical service. The seven departments were able to provide in different degrees, adequate and timely services to clients. Loevinsohn (1994) emphasized that timely, accurate and relevant information is a prerequisite to making good decisions on effective policies and services. Health information is required for strategic planning and for setting priorities. The delivery of timely services to the customers of the provincial hospital is a matter of justice to the constituents of this part of the country.

Moreover, Stansfield, Walsh, Prata, and Evans (2005) stressed that to collect, collate, analyze and communicate the necessary information in a timely and understandable fashion requires organized processes and procedures and a comprehensive health information system. They also emphasized on the striking difference between the need for information and the ability to respond to that need. The provincial hospital is obviously challenged to continue their best practices and work on the weak areas so the hospital can give its best service to its clients.

Conclusions and Recommendations

The study results support the need to use evidence-based decision making as a current thrust among health program managers, including those of the provincial hospital. This study demonstrates that the current state of the information system at the regional hospital is complex and changing but needs improvement.

The findings indicated that the status of the hospital information processes in the different clinical sections of the hospital such as the ER, outpatient section, clinical ward, operating/delivery room, laboratory, radiology, and the records section had significant differences in the hospital information processes in the different clinical and records sections of the seven departments. The dimensions measured the collection, collation (filing and data banking) recording, processing, data analysis, data utilization, feedbacking and data dissemination.

Just like any other institution, the provincial hospital had problems in the operation of information system processes. Foremost is the lack of funds to provide the much-needed technology to manage all hospital functions and help improve hospital information processes in the most efficient way possible.

The provincial hospital has been experiencing problems related to shortage of human resources for the following reasons—the lack of manpower attributed to the moratorium on hiring new personnel because of financial problems according to the Department of Budget and Management; the rapid turnover of personnel because of employee resignation due to their desire to get a better job; the existing number of human resources cannot not cope with the demands of regular recording of cases especially during night shift. These factors contributed greatly to the current status of management of the information system in the provincial hospital.

Based on the findings of the study, the following are recommended to improve the management of information system in the medical service of the provincial hospital. First is the need for an integrated HIS that manages all hospital functions that is affordable and can improve operational efficiency, care quality and patient satisfaction. There is also a need to enhance proper information dissemination, recording, and follow up for effective utilization. Updates on basic and necessary information of personnel like addresses, phone numbers, etc., with regards to the hospital information, communications should be written for records purposes to ensure uniformity and proper dissemination, to avoid duplication and miscommunication and to verify any important information for legal and other purposes. Records and charts should be routinely monitored. There should be a regular submission of reports to proper authority. Strict compliance of all patients' charts by the physician and other involved personnel on a regular basis. For human resources, they should encourage weekly and monthly conference/ meetings of all the hospital personnel. Hospital duties and assignments should be strictly checked and monitored to ensure proper endorsement of cases and records. Designation of a key person assigned in handling/ gathering of records and reports in each section. Finally, it is recommended that the provincial hospital conducts proper orientation/ training of all staff in all hospital sections regarding collection/ upgrading and handling records.

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JOB PERFORMANCE AND JOB SATISFACTION AMONG EMPLOYEES OF A HOSPITAL: BASIS FOR A PERSONNEL DEVELOPMENT PROGRAM

Pacholo P. Abellera, MD, MAHA, Marleonie M. Bauyot, PhD

The study determined the degree of employees' job performance, satisfaction, and dissatisfaction in a hospital that can serve as the basis for personnel development program. The level of employees' job satisfaction, as measured by motivators as satisfiers, was also determined in terms of achievement, recognition, work itself, responsibility, promotion and growth. Furthermore, the extent of employees' job satisfaction measured by hygiene was also determined in terms of compensation, relationship with peers, relationship with supervisors, company policy, work environment, status, and job security. Universal sampling was employed for participant selection. Results showed that indicators under job satisfaction measured by motivators and hygiene were described to be fairly satisfied*, except compensation, which was described as* least satisfied*. In contrast, indicators under job performance were described to be* highly satisfied*. Furthermore, significant relationships existed between job satisfaction as measured by motivators and job satisfaction measured by hygiene with job performance. There was no significant difference between job satisfaction as measured by motivators, job satisfaction measured by hygiene with job performance when the respondents were grouped according to age and length of service. When grouped according to work assignment, a significant difference in job satisfaction measured by motivators and hygiene existed but no significant difference in job performance was noted. Based on gender, there was no significant difference in job satisfaction as measured by motivators and hygiene, but there was a significant difference in job performance. The study recommends that the management utilize the results to address job satisfaction, job performance improvement, and turnover elimination issues.*

Introduction

Werther and Danis (1985) reported that there often is a positive relationship between high satisfaction and improved performance, but most results are not significant. There are many satisfied workers who are not high producers. Satisfaction by itself is not a strong motivator but it may maintain employees so that they are more receptive to a motivational environment when it is provided. This connection probably accounts for the relationship often found between satisfaction and performance. Furthermore, individual characteristics also affect job satisfaction. Those with high negative effectivity are more likely to be dissatisfied with their jobs (Nelson & Quick, 2006).

Job performance is defined as the quality and quantity of work expected from an employee, while job satisfaction is a complex construct and often measured as a global attitude of an employee towards his job. An employee's level of satisfaction varies with specific aspects of the job. The five aspects of job satisfaction are: satisfaction with work attribute, which includes nature of work, autonomy, and responsibility; rewards, defined as pay, promotion and recognition; other people, which includes supervisors and co-workers or peers; organizational context, which includes policies, procedures and working conditions; and self or individual difference, which includes internal motivation and moral values (Leopoldo, 2002).

Likewise, the government regulating bodies such as the Philippine Health Insurance Corporation (PhilHealth) and Department of Health (DOH) also play a role in job performance evaluation of both private and government hospitals. The PhilHealth, which is the government regulating body of hospitals in partnership with the DOH, had mandated that all hospitals in the Philippines should implement the Benchmarking Program. One of the items in patient care is the implementation of a performance improvement program. This means that there should be a continuous and systematic upgrading of performance target from previously accepted minimal standards, and management should adopt a policy advocating continuous quality improvement in all levels of the organization.

A study on factors affecting job performance of employees should be undertaken to address the above concerns. In addition, some employees of the hospital have been lost to competition due to factors like work compensation, although this may not be the sole cause of employees' turnover. According to Fisher, Schrenfeldt, and Shaw (2003), there are two variables that cause employees to quit their jobs: 1) external factors, which include employees' perception of external job opportunities available to them, unemployment rate; and 2) internal factors, which include employees' attitude or perception with respect to the current job. When they perceive that the organization treats them unfairly, poor relationship with supervisors, job requirements are conflicting, unclear or stressful, or if opportunities for growth, development and promotion are lacking, they would leave. A well compensated employee is a satisfied employee and a very productive one. If they feel that they were not well compensated, it also follows that they would be dissatisfied and as a result, their job performance would be affected and eventually would seek work from elsewhere.

According to Katcher (2002), seven out of 10 employees do not believe that there is a clear relationship between pay and job performance. Most of them believed that their performance is above average and they feel that they are not adequately paid compared to those doing similar work and therefore their pay is not far with their job performance. They also feel that there are poor performers in their organization who are earning as much if not more than they earn, therefore, "if the lazy so and so" is still there, that means they are underpaying me for my job. Employees want to be paid commensurate to the quality of their job performance. To do so requires a constructed pay program, commitment from supervisors, well orchestrated communication to employees about their pay.

Kinzl, Knotzer, Traweger, Lederer, Heidegger, and Benzer (2004) reported that a high level of job satisfaction in the workplace for anesthetists correlates positively with interesting work demands and the opportunity to contribute skills and ideas. To improve job satisfaction, more attention should be paid to improving working conditions, including control over decision making and allowing anesthetists to have a say in their own work, and work schedule. Furthermore, according to Knight (2004), in order for hospitals to prevent employees from leaving, it has basically two options: 1) decrease the influence of dissatisfiers by trying to eliminate them, or 2) sway the balance towards satisfaction by increasing the quantity and quality of the satisfiers. Salaries should be the first to be addressed. With adequate salaries, current employees may be less inclined to leave their jobs. Another area, which administrators should consider to address employees' dissatisfaction and turnover, is finding ways to increase the staff's autonomy while on the job. Supervisors can consider allowing them to make many of the decisions and choices traditionally handled by management. Things like allowing the staff to make their own call and clinical rotation schedules may help provide some sense of ownership. Allowing the staff some time away from their routine duties to work on their self-directed projects (like research or professional writing) might add to their feeling of autonomy and self-worth, and at the same time, indirectly benefit the department and the institute.

The fast turnover of employees and staff in considerable numbers in a hospital had prompted this study. From the above literature, reasons for employees leaving their job are because of job dissatisfaction and reasons for them to stay are because of job satisfaction. Since job satisfaction/dissatisfaction seems to be correlated with job performance, it is of importance to find out what other factors influence job satisfaction and dissatisfaction.

Theoretical/ Conceptual Framework

The study is based on the motivation-hygiene theory of Frederick Herzberg in 1959 and Abraham Maslow's hierarchy of needs. Motivation-hygiene theory claims that factors causing job satisfaction were different from that causing job dissatisfaction. He called the satisfiers, motivators and hygiene factors as dissatisfiers. According to Zulueta and de Lara (2002), hygiene/maintenance factors are related to the environment surrounding a job. When they are present, there is no motivation, when absent, there is dissatisfaction. Motivator factors are aspects of work related to job satisfaction but not to dissatisfaction.

According to the motivator-hygiene factors, people are influenced by two factors: (1) satisfaction, which is the result of motivator factors, which increases satisfaction; and (2) dissatisfaction, which primarily is the result of hygiene factors. These factors, if absent or inadequate, cause dissatisfaction

(Zulueta & de Lara, 2002). Motivator factors include achievement, recognition, work itself, responsibility, promotion, and growth. Hygiene factors consider pay, company policy, relationship with co-workers, relationship with supervisors, physical environment, status and job security. Herzberg's theory further shows that since the factors causing satisfaction are different from those causing dissatisfaction, the two cannot be considered as opposites. The opposite of satisfaction is not dissatisfaction, but no satisfaction, while the opposite of dissatisfaction is no dissatisfaction.

Abraham Maslow said there are two (2) distinct human needs. First is the physiological need that can be satisfied by money. Second is psychological, which is for achievement and growth. Maslow claims that much of human behavior is devoted to gratifying needs. He designed a hierarchy that show the levels of human needs of which physiological survival needs are the most basic, followed by needs for safety, and belongingness. Beyond these are higher needs for esteem and the highest of all, for self-actualization (Fireman, Sims, & Yiannas, 2005).

The Conceptual framework presented in this study consists of three (3) variables namely: independent variables, dependent variables, and moderator variables. The independent variables in the study are: compensation, relationship with supervisors, relationship with peers, company policy, physical environment, achievement, recognition, work itself, responsibility, promotion and growth. The dependent variables are quality of work, quantity of work, customer care and competence. These variables are inter-correlated. However, these two variables can be affected by the moderator variables: age, length of service, work assignment and gender.

Independent Variables

Factors
- ❖ Job Dissatisfaction

-Compensation
-Relationship with peers
-Relationship with supervisors
-Physical environment
-Company policy
- ❖ Job Satisfaction

-Achievement
-Recognition
-Work itself
-Promotion
-Responsibility
-Growth

Dependent Variables

Job performance
- ❖ Quality of work
- ❖ Quantity of work
- ❖ Customer care
- ❖ Competence

Moderator Variables

Profile
- ❖ Age
- ❖ Length of service
- ❖ Work assignment
- ❖ Gender

Figure 1. Conceptual Model: Factors Affecting Job Performance of Employees

Methods

The study employed descriptive-correlation research design, which determined degree of relationship between compensation, relationship with peers, relationship with supervisors, physical environment, company policy, and job performance among employees at a hospital. It also determined degree of relationship between achievement, recognition, work itself, responsibility, promotion, growth and job performance among the employees.

The study was conducted at a PhilHealth accredited tertiary hospital with a bed capacity of 110, owned and managed by a group of doctors in partnership with a diocese. Pertinent permits for research conduct were obtained prior to actual data gathering including permission from the hospital administrators, and orientation of target research participants. Research participants were regular employees of the hospital, which included resident physicians, nursing service staff, administrative staff, midwives, laboratory personnel, pharmacy personnel, dietary personnel and the janitorial service staff. There were 184 participants selected using universal sampling (Table 1).

Table 1. Hospital employees distribution.

Respondents	Population	Research Sample	%
Resident Physicians	7	7	4
Administrative Personnel	32	32	17
Nursing Staff	50	50	27
Midwives	21	21	11
Laboratory Personnel	15	15	8
Pharmacy Personnel	10	10	5
Janitorial Personnel	30	30	16
Radiology Personnel	8	8	4
Dietary Personnel	11	11	6
Total	*184*	*184*	*100*

The researcher-made tool (with Cronbach's alpha score of 0.81) used to gather the data had three parts: Part I established the profile of the participants, Part II established the factors affecting job performance and Part III determined the performance. The indicators for job satisfaction were compensation, relationship with peers, relationship with supervisors, physical environment, and company policy. The job dissatisfaction indicators include achievement, recognition, work itself, promotion, responsibility, and growth. For job performance: quality and quantity of work, customer care, and competence were included. A 5-point Lickert scale was used to interpret responses (Table 2). Relationship between employees' job performance and job satisfaction was measured using Pearson's Product Moment Correlation.

Table 2. Scale and Interval of the Measures of Responses

Point Estimate	Interval Estimate	Description
1	1.00-1.50	Not Satisfied
2	1.51-2.50	Least Satisfied
3	2.51-3.50	Fairly Satisfied
4	3.51-4.50	Highly Satisfied
5	4.51-5.00	Very Highly Satisfied

Results and Discussions

Employees' Level of Job Satisfaction

The level of job satisfaction of employees measured by hygiene as dissatisfiers showed that relationship with peers had the highest mean whereas compensation is given the lowest rating (Table 3). In terms of job satisfaction as measured by motivators, responsibility had the highest mean whereas growth had the least mean (Table 4).

Table 3. Level of Job Satisfaction of Employees as measured by Hygiene as Dissatisfiers.

Variables	Mean	SD	Description
Job Satisfaction	2.94	0.63	FS[a]
Compensation	2.50	0.92	LS[b]
Relationship with peers	3.23	1.08	FS[a]
Relationship with supervisor	3.19	0.86	FS[a]
Physical environment	2.78	0.92	FS[a]
Company policy	2.98	0.83	FS[a]

[a]FS-Fairly Satisfied; [b]LS-Least Satisfied

Table 4. Level of Job Satisfaction of Employees as measured by Motivators as Satisfiers.

Variables	Mean	SD	Description
Job satisfaction	2.97	0.58	FS[a]
Achievement	3.17	0.85	FS[a]
Recognition	2.79	0.95	FS[a]
Work itself	3.07	0.93	FS[a]
Responsibility	3.22	0.96	FS[a]
Growth	2.62	0.92	FS[a]

[a]FS-Fairly Satisfied

Table 5 presents the level of job performance of the employees. Among the variables, customer care has the highest mean while quantity of work has the lowest rating.

Table 5. Level of Job Performance of Employees.

Variables	Mean	SD	Description
Job performance	3.60	0.53	Has
Quantity of work	3.46	0.95	FS[b]
Quality of work	3.56	0.93	Has
Customer care	3.79	0.95	Has
Competence	3.60	0.92	Has

[a]HS-Highly Satisfied; [b]FS-Fairly Satisfied

Relationship between employees' job performance and job satisfaction

Results reveal in Table 6 that the *r* value between job satisfaction as measured by motivators as satisfiers and job performance is 0.523 with a *p* value of 0.000 indicating a significant relationship between job satisfaction as measured by motivators as satisfiers and job performance. The *r* value between job satisfaction as measured by hygiene as dissatisfiers and job performance is 0.640 with a *p* value of 0.000, which suggests a significant relationship between job satisfaction as measured by hygiene as dissatisfiers and job performance.

Table 6. Test on the Significance in the Relationship between Job Performance and Job Satisfaction as Measured by Motivators as Satisfiers, Job Satisfaction as Measured by Hygiene as Dissatisfiers.

Variables	*r* value	*p* value
Job Satisfaction as Measured by Moderators as Satisfiers	.523[a]	.000
Job Satisfaction as Measured by Hygiene as Dissatisfiers	.640[a]	.000

[a]*significant at α=0.05*

Table 7 presents the differences in the job satisfaction as measured by motivators as satisfiers, and hygiene as dissatisfiers, and job performance when respondents were grouped according to profile. However, when participants were grouped into age and length of service, no significant difference in job performance satisfaction was obtained. A significant difference in job satisfaction was accounted for when participants were grouped according to their work assignment. There is no significant difference in job performance when participants are grouped according to work assignment was noted. When grouped according to gender, no significant difference in job satisfaction is obtained but a significant difference in job performance is noted.

Table 7. Test on the Significant Difference in the Job Satisfaction as measured by Motivators as Satisfiers, Job Satisfaction as measured by Hygiene as Dissatisfiers and Job Performance when participants are grouped according to profile.

Variables	Profile	Groups	N	Mean	*p* value
Job Satisfaction as Measured Motivator	Age	19-29	64	2.91	
		30-40	37	3.09	0.299
		41-50	15	2.84	
		Total	116	2.96	
Job Satisfaction as Measured by Hygiene	Age	19-29	62	2.98	
		30-40	37	3.13	0.396
		41-50	15	2.97	
		Total	114	3.03	
Job Performance	Age	19-29	62	3.72	
		30-40	37	3.81	0.200
		41-50	15	3.48	
		Total	114	3.72	
Job Satisfaction as Measured by Motivators	Length of Service	1-5	90	2.89	
		6-10	19	3.18	0.129
		11-above	8	3.14	
		Total	117	2.96	
Job Satisfaction as Measured by Hygiene	Length of Service	1-5	88	2.98	
		6-10	19	3.15	0.386
		11-above	8	3.18	
		Total	115	3.02	
Job Performance	Length of Service	1-5	88	3.7	
		6-10	19	3.15	0.742
		11-above	8	3.18	
		Total	115	3.02	

Job Satisfaction as Measured by Motivators	Work Assignment	Doctors	2	3.16	
		Admin	23	3.13	
		Nurses	29	2.80	
		Midwives	15	3.09	0.025[a]
		MedTech	5	3.63	
		Pharmacy	5	2.72	
		PharmAide	3	2.79	
		RadTech	4	3.63	
		FoodServer	4	2.58	
		Janitor	23	2.80	
		Total	113	2.97	
Job Satisfaction as Measured by Hygiene	Work Assignment	Doctors	2	3.54	
		Admin	23	3.53	
		Nurses	28	3.01	
		Midwives	15	3.07	.028[a]
		MedTech	4	3.77	
		Pharmacy	5	2.63	
		PharmAide	3	3.72	
		RadTech	4	3.41	
		FoodServer	4	2.79	
		Janitor	23	2.79	
		Total	111	3.03	
Job Performance	Work Assignment	Doctors	2	3.08	
		Admin	23	3.86	
		Nurses	28	3.71	
		Midwives	15	3.89	.122
		MedTech	4	4.22	
		Pharmacy	5	3.69	
		PharmAide	3	3.52	
		RadTech	4	4.06	
		FoodServer	4	3.44	
		Janitor	23	3.41	
		Total	111	3.72	
Job Satisfaction as Measured by Motivators		Male	39	2.90	
	Gender	Female	77	3.02	.316
Job Satisfaction as Measured by Hygiene	Gender	Male	38	2.99	
		Female	76	3.06	.550
Job Performance	Gender	Male	38	3.58	.042[a]
		Female	76	3.81	

[a]*significant at α=0.05*

The hospital personnel were relatively young with more than half of the employees, (55%) belonging to the 19 – 29 age group. This was advantageous to the hospital considering that this was the most productive age group. A small fraction (1%) belonged to the golden age group, and the rest to the 30 – 50 years old age group. Most of them (77%) had been in their position for less than 10 years, while a small number (6%) had been with the hospital since its birth. There was a significant relationship between job satisfaction as measured by hygiene as dissatisfiers and job performance. This was further articulated by the participants in rating the different variables under job satisfaction as measured by hygiene as dissatisfiers as fairly satisfactory except for compensation, of which they were least satisfied.

The majority of the workforce (27%) came from the nursing service. The administration department composed of 17 percent of the employees; janitorial service was 16 percent while the doctors comprised 3.8 percent. Majority of the employees were female (69%). The registered nurses who worked in private psychiatric hospitals were fairly satisfied with their jobs. However, relative to most employees, from housekeepers to psychiatrists, registered nurses reported the lowest levels of job satisfaction.

The participants were fairly satisfied with the company policy. They felt that company policy is seemingly too strict and that the management was always looking out for or trying to find fault with how they were doing in their jobs. A feeling of resentment seemed to exist as even the slightest mistake was dealt with an IR or incident report. Employee satisfaction occurs when companies treat their employees well in a way that exceeds their expectations (Williams, 2008). Workplace support was the most important factor affecting job satisfaction.

The relationship with supervisors was another major factor affecting job satisfaction. The participants articulated that since the supervisors are the frontliners in implementing company policy, they thought that supervisors are part of the company policy. They also thought that the supervisors were not fair in implementing policies. Nnadi, (1997) reported that supervisors can also be a factor in job satisfaction. Employees may be more satisfied when supervisors are fair to everyone. Poor relationship with their supervisor is often the reason employees quit their job. If an employee has a good relationship with their supervisor, loyalty to a supervisor may help combat any lack of commitment to the institution itself. Knowing this, institutions must provide an environment where effective managers can develop and flourish (Knight, 2004).

Ranking third as dissatisfier was the physical environment. Participants commented that there were no adequate accommodations for those who were on duty, especially during the graveyard shift. It was also relayed that the medical technologists were the only ones afforded adequate and suitable quarters. Office space was also not adequate, according to some respondents.

Participants seemed to be least satisfied with compensation. The employees felt that compared to compensations offered by neighboring hospitals, they were not paid fairly nor given a fair raise. This was a feedback given by an employee during the exit interview conducted by the Human Resources Department in 2007. They were also not clarified about how the company's pay structure works. The degree of influence money exerts on employees varied from one individual to another. A salesperson's perception of fairness in the company's compensation program affected job satisfaction of salespeople (Turner & Brown, 2004). Individuals who believed they were not well compensated would be unhappy working for anyone (Nnadi, 1997). One of the challenges posed by compensation was that employees often did not understand how the pay structure works within their organizations.

Among the fairly satisfied aspects of job dissatisfaction, it was with the relationship with peers that the participants gave the highest score. There was also no significant difference in job satisfaction as measured by hygiene as dissatisfiers when participants were grouped according to age, length of service and gender. However, when respondents were grouped according to work assignment, there was a significant difference in job satisfaction as measured by hygiene as dissatisfiers. The relationship between job performance and job satisfaction as measured by motivators as satisfiers was significant. As to the level of satisfaction, the participants were fairly satisfied with achievement, recognition, work itself, responsibility and growth. Achievement, of which the participants were only fairly satisfied, ranked the highest among the satisfiers. The participants felt that they have not achieved something during their stay at the hospital. Their achievements have not been appreciated by the organization and no opportunities for personal growth were given to them. Majority expressed the lack of training opportunities and lack of room for advancement and self-actualization. Individuals at all levels of the organization wanted to be recognized for their achievements on the job. Their successes need not be monumental before they are given recognition, but praises should be sincere. It is a useful gesture to notice employees doing something well and acknowledging their good work immediately. There was no significant difference when participants were grouped according to age, length of service and gender. However, there was a significant difference when participants were grouped according to work assignment. In terms of job satisfaction measured by hygiene as dissatisfiers, the medical technologists were the most satisfied, followed by the pharmacy aides, doctors, administrative personnel, radiology technicians, midwives, nurses, food servers and janitors, and pharmacists.

The perception of the participants on their level of job performance was interpreted as highly satisfied in all four aspects, namely: quality of care, quantity of care, customer care and competence. There was no significant difference in job performance when participants were grouped according to age, length of service and work assignment. However, there was a significant difference in job performance when participants were grouped according to gender. Females seemed to perform better than males. Competency was a key factor in human resources management in terms of building a capable organization. The goal of management is to create an effective job performance. To be able to achieve this, it has to fulfill three factors; individual competency, job's demand, and organizational environment.

Conclusions and Recommendations

The results showed job satisfaction as measured by motivators as satisfiers and hygiene as dissatisfiers affected job performance of employees in the hospital. There was a significant relationship between job satisfaction as measured by motivators as satisfiers and job performance and there was also a significant relationship between job satisfaction as measured by hygiene as dissatisfiers and job performance. Job satisfaction as measured by motivators as satisfiers and job satisfaction as measured by hygiene as dissatisfiers were also affected when participants were grouped according to work assignment. Job performance was also affected when participants were grouped according to gender. Findings ~~of the study~~ suggested that the hospital management should address the issues that caused job satisfaction and dissatisfaction to improve job performance. The validity and effectiveness of the current staff/employees compensation package must be reviewed to determine needed changes and to ensure fair compensation to employees. The administration may consider creating a committee to review the staff compensation system and make recommendations for modifications and changes. Activities that could build collaborative relationships among the staff, employees and stockholders such as team building seminars and the like may also be contemplated by the administration while keeping communication lines between supervisors and employees open. One way of addressing this is to increase opportunities for interaction among employees during staff meetings and other activities. Quarters should be provided for the staff within the hospital premises. Management must inculcate into the minds of the employees the importance of proper policy implementation; as well as seek employees' perception of current policies through discussions, meetings and interviews. Management should install a reward system for employees as a motivator for better job performance. The organization must create new ways to keep employees satisfied at all levels. Surveys should be conducted to determine what was causing employees dissatisfaction and steps that were taken when the root cause was discovered. The administrators should place employees in positions that would utilize and maximize their talents and set clear, achievable goals and standards for each job. The administrators have to ensure that employees know the goals and ideals of the organization. Individuals should also receive regular, timely feedback on their performance and challenge them without being too complicated as it might paralyze their professional growth. Employees are more motivated to do their jobs well if they have ownership of their work. This requires giving employees enough freedom and power to carry out their tasks to feel they "own" the result. As individuals mature in their jobs, the corporation must provide opportunities for added responsibilities. Finally, it is recommended that a job performance tool be designed and used as an evaluation tool to replace the existing performance evaluation tool of the hospital.

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