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THE CHINESE IN ILOILO: 1581-1900

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ILOILO is one place in the Philippines where Chinese influence has been profound and dates back to ancient times. Long before the coming of the Spaniards Iloilo already had trade relations with China. In the early period, probably from the tenth to the twelfth century, the Chinese traded from the decks of their vessels, or in safer places, from some recognized trading stations along the shore.[1] However, after the twelfth century, some Chinese merchants began to settle at the chief ports of the Philippines to handle the trading activities. One of those early Chinese settlements was located in Iloilo.

The Chinese brought iron bars, procelain and pottery, silk and woven cloths, beads and other forms of cheap jewelry, bronze gongs, small bells and various other articles. They bartered these with the natives for raw cotton, abaca and other fibers, hardwoods, rattan, nito, gums, resins, beeswax, edible nuts, placer gold, fancy corals, mother-of-pearl shells and some other products of the islands.[2]

The large quantities of Sung, Yuan and Ming porcelain wares that have been recovered in several archaeological sites in Iloilo attest to the big volume of trade that the Chinese had with the province in those early days. And the Chinese did not only come to trade. Many of them came to stay. By the time the Spaniards arrived in Iloilo in the sixteenth century the Chinese colony was quite large. A proof of this is that shortly after the Spaniards had founded Arevalo in 1581, Fray Juan de Medina reported:

> There are more than one hundred Chinese married to native women in this town, and their number is increasing daily so that I think they will end by peopling the country.[3]

During the early part of the Spanish Period, the Chinese engaged in buying and selling. They also provided such essential services as barbering, cooking, shoemaking and tailoring to the small Spanish

[1] H. Otley Beyer, "Philippine Pre-Historic Contacts with Foreigners." In Shubert S.C. Liao, *Chinese Participation in Philippine Culture and Economy* (Manila, 1964), p.8.

[2] *Ibid.*, p. 9.

[3] Fray Juan de Medina, O.S.A., "History of the Agustinian Order in the Philippines." In Emma Blair and James A. Robertson, *The Philippine Islands, 1492-1898* (Cleveland: Arthur H. Clark & Co., 1903-1909), v. 23, p. 216. Hereafter cited as Blair and Robertson.

community in Arevalo (then the capital of the *alcaldia* of Panay) as well as to the Ilonggos in the town and the neighboring places. It was the Chinese who introduced the use of wooden shoes *(bakya)*, umbrellas *(payong)*, and slippers *(chinelas)* to the Filipinos.[4] In 1609, Antonio de Morga made this statement about the Chinese in the Philippines:

> They are excellent workmen and skillful in all arts and trades. It is true that the colony cannot exist without the Chinese as they are the workers in all trades and business and are very industrious and work for small wages.[5]

Yet, although their services were needed, the Chinese were harshly treated by the Spaniards. Apprehensive at the growing number and influence of the Chinese, and for purposes of raising revenues through taxation, the Spanish authorities decided to concentrate the Chinese at certain places where they could be easier observed and their activities closely monitored.

The place designated for the Chinese quarter and market was called *parian.*[6] In Iloilo the place chosen for the Chinese *parian* was Molo. We could not ascertain when the *parian* in Molo was established but the one in Manila was set up by Governor-General Gonzalo Ronquillo de Peñalosa in 1581, the same year when he founded Arevalo.[7] It is interesting to note that until today many people in Iloilo still refer to Molo as "Parian."

A legend says that Molo got its name because the Chinese could not pronounce the word "Moro." The legend runs this way: In the olden times Moros (Moslems) from Mindanao frequently raided the coastal towns of Iloilo. In Molo, the Chinese assigned watchmen on the seashore to warn the people of the approach of the Moros. Whenever Moro *vintas* appeared in Panay Gulf the Chinese *bang-tai* on watch immediately ran around the town excitedly shouting "Molo! Molo!" Because of this, the people named the placed Molo. Incidentally, the Ilonggo word *bantay* (sentinel, guard, watchman) is derived from the Chinese word *bang-tai* which has the same meaning. And there are hundreds of Chinese words that have been incorporated into the Ilonggo dialect.

The Chinese in Iloilo, like those in Manila and other places in the Philippines, were subjected to heavy taxation. In 1581 Governor-General Ronquillo de Peñalosa collected a tariff of 3% of the value of Chinese goods brought into the country.[8] In 1616 the tariff was

4 Gregorio F. Zaide, "Impact of Asia's Great Traditions on the Philippines," *Historical Bulletin*, XI (March 1967) 58-59.

5 Antonio de Morga, *Sucesos de las Islas Filipinas*, anotada por Jose Rizal (Paris: Garnier Hermanos, 1890), p. 349.

6 *Parian* is a Mexican term meaning market.

7 Antonio de Morga, *Historical Events in the Philippines*, annotated by Jose Rizal (Manila: Jose Rizal National Centennial Commission, 1962), p. 17. Ronquillo named Arevalo after his native place in Spain. The original name of the town was La Villa Rica de Arevalo. At present the official name is Arevalo but people call it Villa.

8 Blair and Robertson, v. 5, p. 239.

doubled to 6%. In addition to this the Chinese paid an annual tribute, a tax on permission to stay in the islands, a license tax to do business or engage in some work, and a residence tax. In 1970 the King ordered a head tax *(cedula de capitacion).* This particular tax was of three kinds. While the Indios (Filipinos) paid only ₱1.50 a year, the Chinese *mestizos* were required to pay ₱3.00 and the Chinese ₱6.00.[9]

The Chinese evaded some of these exactions by embracing Christianity. Any Chinese who became a Christian was exempted from paying the tribute for ten years.[10] In addition to the taxes levied on them, the Chinese underwent other kinds of persecution, including wholesale massacres, as what happened in 1603 when on a "flimsy pretext" the Spaniards killed some 25,000 Chinese in Manila. After the massacre, however, the Spaniards found out that "there were no more barbers, tailors, cooks, shoemakers, farmers and herders,"[11] and so they again encouraged the Chinese to come to the Philippines. It should be pointed out, at this point, that throughout the Spanish Period, the Chinese had always far outnumbered the Spaniards in the Philippines and so the latter were often fearful that the Chinese might revolt or aid the Filipinos to revolt.

The Spaniards did not like the Chinese but they could not do without them. The Chinese were a good source of revenue; they brought merchandise from China; they exported Philippine products and performed many necessary services. Then came the British invasion and capture of Manila in 1762 which proved that the much vaunted military might of Spain was not unbeatable after all. The Spaniards became afraid that their defeat from the British might embolden the Chinese to revolt. In 1766, the Spanish government decided to expel the Chinese from the Philippines. The third biggest number of the Chinese who were thrown out of the country came from Iloilo.[12]

But not all the Chinese were expelled. Some 5,000 of them were allowed to remain. The Spaniards thought that this number was enough to carry out functions in trade and the crafts which they deemed essential, but not big enough to pose a threat to the government or the Spanish community.[13]

9Carl C. Plehn, "Taxation in the Philippines," *Political Science Quarterly,* XVI (1901) 659-696. Also Blair and Robertson, v. 50, p. 65.

10Blair and Robertson, v. 22, p. 158.

11John Crawford, *A Descriptive Dictionary of the Indian Islands and Adjacent Archipelago* (London: Bradbury & Sons, 1856), pp. 98, 350. Also Antonio S. Tan, *The Chinese in the Philippines, 1898-1935: A Study of Their Awakening* (Quezon City: R.P. Garcia, 1972), p. 24.

12Alfonso Felix, Jr. (ed.), *The Chinese in the Philippines, 1770-1898* (Manila: Solidaridad Publishing Co., 1969), v. 2, p. 22.

13Philip Ginsberg, "The Chinese in the Philippine Revolution," *Asian Studies,* III (April 1970) 143-159.

The Chinese Mestizos

From pre-Spanish time to the eighteenth century hundreds of Chinese had settled in Molo. They embraced the Christian faith and intermarried with Ilonggos, and in some cases, with Spaniards and Spanish *mestizos.* Their descendants, in time, spread out to Arevalo, Oton, Jaro, Iloilo and other nearby towns. These progenies of mixed Chinese-Ilonggo, Chinese-Spanish, or Chinese-Ilonggo, Spanish blood were called *mestizos-Chinos* or *mestizos-Sangleyes* by the Spaniards and *mestizo-Insik* by the Ilonggos. They inherited the craftmanship, business acumen and skills of their Chinese forebears and they soon gained importance in trade and industry. By the time the Chinese expulsion came in 1766, the Chinese *mestizos* of Iloilo were more than ready to take over the functions of the Chinese in the arts and trades. Their wealth and social standing also enabled them to join the *principalia,* the local ruling class.

Nicholas Loney, the first British vice consul and merchant in Iloilo (1856-1869), made the following impression of the Chinese *mestizos:*

> The Yloilo *mestizos,* especially those of Chinese origin, are a remarkable commercial, industrial and speculative race, increasing yearly in social and political importance.[14]

One example of a Spaniard who married a Chinese *mestiza* and prospered was Don Joaquin Ortiz from Andalucia, Spain. He came to Iloilo around 1835. Assisted by his wife, he engaged in trading, particularly in tobacco. The couple were able to accumulate a large capital so that in 1856 they built a second warehouse and ordered the construction of a 300-ton vessel to be employed in trading with Manila and even with Singapore.[15]

When Governor-General Narciso Claveria decreed in 1849 that all Filipinos should bear family names (for purposes of taxation and law enforcement) the Chinese *mestizos* in Iloilo hispanized their Chinese names and made these their family names. For example, Loc Sing became Locsin. Many prominent Ilonggo families today can trace their ancestry to those early Chinese *mestizos.* To mention several of them, aside from Locsin, there are the families Yulo, Yusay, Lacson, Layson, Ganzon, Tinsay, Consing, Quimsing, Conlu, Sian, Tiongco, Guanco, Pison, Ditching, Sitchon, and Dingcong.

A Spanish document states that in 1799 there were 975 *mestizos* in Iloilo but it is possible that the actual number was higher.[16] Certainly, the Chinese *mestizos* were

[14] Nicholas Loney, "Report to John William Farren," dated at Iloilo, 10 July 1861. Found in the Public Records Office, London (PRO FO 72/1017).

[15] Nicholas Loney, "Letter to his sister Nanny," dated at Jaro, 22 November 1856. In *A Britisher in the Philippines* (Manila: The National Library, 1964), p. 61.

[16] Manuel Bużeta and Felipe Bravo, *Diccionario Geografico, Estadistico y Historico de las Islas Filipinas* Madrid: J.C. de la Peña, 1850-1851), v. 1, p. 105.

numerous enough to make the Spanish authorities recognize their significance as taxpayers. In 1800, for instance, Joaquin Martinez de Zuñiga wrote that "there were 29,723 native and Chinese *mestizo* taxpayers in Iloilo.[17] It must be pointed out that the Chinese *mestizos* paid double the head tax paid by Filipino taxpayers because it was believed that the *mestizos* had higher earnings.

Some Chinese, in order to be identified as Filipinos, adopted Ilonggo family names at their baptism as Christians. Some children of Chinese fathers and Ilonggo mothers also carried the surnames of their mothers. The *Guia de Forasteros* of 1856 gave the number of Chinese *mestizo* taxpayers in Molo at 1,085 out of a total of 4,143 taxpayers in the town. There were 114 Chinese *mestizo* taxpayers in Arevalo, 78 in Mandurriao, 56 in Jaro, 18 in Iloilo and nine in Oton.[18] Since people at that time started paying taxes at age 25, the actual number of Chinese *mestizos* in Molo and the surrounding towns was therefore higher than the figures listed by the *Guia de Forasteros.*

More Chinese Immigration

It did not take a long time before the Spanish authorities realized that more Chinese workers were needed, especially in agriculture. In 1804, the government decreed that Chinese who would devote themselves to agricultural pursuits were allowed to live in the Philippines.[19]

Many Chinese farmers came to Iloilo. They introduced the planting of the *meng* bean (mongo), *mani* (peanut) and some varieties of rice and vegetables. They brought better breeds of livestock and work animals as well as introduced better methods of production. The Chinese were the first builders of the muscovado sugar mills in Iloilo.[20] They built wooden cane crushers run by carabao or oxen and used large Chinese vats *(kawa)* for boiling the sugarcane juice.

In 1834, the year Manila was declared open to international commerce, the Spanish government allowed the Chinese to embark on any branch of industry provided they secured a license from the government.[21] In Iloilo, one industrial innovation made by the Chinese was the production of salt

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[17] Joaquin Martinez de Zuñiga, *Status of the Philippines in 1800,* tr. by Fr. Isacio Rodriguez (Manila: Filipiniana Book Guild, 1975), p. 455.

[18] *Guia Oficial de Forasteros de las Islas Filipinas* (Manila: Imprinta de los Amigos del Pais, 1856), p. 198.

[19] Liao, *op. cit.*, p. 27.

[20] John T. Omohundro, *Chinese Merchant Families in Iloilo: Commerce and Kin in a Central Philippine City* (Quezon City: Ateneo de Manila University Press and Athens, Ohio: The Ohio University Press, 1981), p. 2.

[21] Liao, *loc. cit.*

with the use of brick-floored evaporating ponds.[22] Before that the Ilonggos manufactured salt by evaporating sea water in bamboo poles cut into halves.

In 1850 Governor-General Urbistondo announced a special regulation for farm immigration from China exclusively to help in food production. The number of farm laborers that a Chinese farmer could engage depended on his annual income. Chinese farmers with an annual income of ₱1,500) to 2,000 could hire 200 farm immigrants and farmers who earned over ₱2,400 a year could engage 400 Chinese laborers.[23]

The response from China was strong and thousands of Chinese immigrants came. By 1880 it was estimated that there were around 100,000 Chinese in the Philippines. It so happened that in the middle of the nineteenth century when the Philippines entered a period of economic transformation, China was undergoing economic, social and political crises. There was rapid population growth and great scarcity of arable land. To make things worse, two armed upheavals occurred, bringing untold havoc upon the people. These were the Opium War of 1839-1842 and the Taiping Rebellion in 1851-1864. The Taiping Rebellion caused the death of some 20 to 30 million people and the destruction of billions of dollars worth of property.[24] In the midst of these difficulties, countless thousands of Chinese left their homeland for other countries. Hundreds of them reached Iloilo.

The Chinese and the Iloilo Textile Industry

The Chinese and the Chinese *mestizos* in Iloilo were active in the textile industry. It must be noted that for centuries Iloilo was a textile center of the Philippines. Ilonggo women were expert weavers, producing large quantities of textile from cotton, abaca, pineapple fibers and from silk. The woven *sinamay*, *jusi*, *nipis* and *guinaras (madriñaque)* were sold in Manila and other provinces. A considerable quantity was also exported to China, Europe and America. In 1854, around $400,000 worth of textile was shipped to Manila and about $40,000 worth was sold in other places.[25] The amount exported to Europe, through Manila, was estimated to be valued at $20,000. Except for silk which was imported from China, the other raw materials in the weaving industry were produced locally or obtained from the neighboring provinces.

22 Omohundro, *loc. cit.*

23 *Manchu East Asian Bureau for Economic Studies*, v. 3, p. 39, cited in Liao, *loc. cit.*

24 Frederic Wakeman, Jr., *Strangers at the Gate: Social Disorders in South China, 1839-1861* (Berkeley and Los Angeles: University of California Press, 1966), pp. 87-108, 117-131.

25 Loney to Farren, 12 April 1857, PRO FO 72/927.

The Chinese and Chinese *mestizos* in Iloilo figured prominently in the shipping and trading of textile. Loney reported that when he arrived in Iloilo in 1856, commerce was principally done by the *mestizo* traders of Molo and Jaro who, "on completing their purchases of locally woven manufactures, embarked with them in numbers of six, ten, fifteen and sometimes twenty, in the coasting vessels leaving for Manila."[26] On the return trip to Iloilo, they brought silk and other commodities from Manila. In 1855 the *mestizo* traders brought some $400,000 worth of silk and about $450,000 worth of other goods to Iloilo. Many of the *mestizos* also owned sailing vessels that plied between Iloilo, Negros, Cebu, Albay, Manila and other places as far south as Jolo.[27]

After the opening of the port of Iloilo to international trade in 1855 more Chinese merchants came, especially after the signing of the Treaty of Tientsien in 1858 between Spain and China. The treaty allowed Chinese merchant ships to come to the Philippines without limitation as to their number and to be treated as those of the most-favored nations. In 1860 the Chinese *parians* were abolished by Governor-General Ramon Solano and the Chinese became more free in conducting business in the Philippines.[28]

As a result of these developments, China became a major market for the products of Iloilo, especially sugar. From 1859 when the first direct exportation of sugar from the port of Iloilo was made, to 1862, all the sugar shipments were sent to Australia. In 1863, however, due to the coming of more Chinese merchant ships, the biggest export of sugar from Iloilo was sent to China, as shown in the following figures: Great Britain — 588 tons, Australia — 3,419 tons, and China — 6,640 tons.[29]

The coming of more Chinese traders to Iloilo and the establishment of the Chinese *cobecilla* system beginning around 1850 caused a major shift in the business activities of the Chinese *mestizo* group in the province. A *cabecilla* system consisted of the head merchant in Manila and his agents in the provinces. The Chinese headmen and their agents could supply the raw materials and purchase the finished products of the textile industry better than the Chinese *mestizo* traders could do. Finding themselves at the losing end of the competition with the Chinese *cabecillas* in the textile business, the *mestizos* shifted their interest to sugar whose production was receiving strong impetus

[26] *Ibid.*

[27] *Ibid.*

[28] Jose Montero y Vidal, *Historia General de Filipinas* (Madrid: M. Tello, 1887-1895), tomo 3, p. 296.

[29] Robustiano Echaus, *Apuntes de la Isla de Negros* (Manila: Litografia de Chofre y Comp., 1894), p. 8.

because of the opening of the port to foreign commerce and the high demand for sugar in the world market.

The Chinese were left in virtual control of the textile industry which, contrary to the assertion of some writers, did not decline with the rise of the sugar industry. Textile weaving in Iloilo continued to grow so that by 1883 the textile export was estimated at around $1 million. At that time there were around 45,000 weaving looms in Iloilo, producing "fine textile of silk, piña and cotton well liked within and outside the country for exquisite beauty."[30]

The textile industry was no longer very profitable to the Ilonggo and *mestizo* businessmen but it was good business for the Chinese. And because the Chinese controlled the industry, they could dictate the cost of materials which they supplied, and the price of the finished woven cloths which they themselves bought. The result was that the Ilonggo weavers, the real producers of wealth, gained minimal income from their labor.

Up to the early part of the 20th century the textile industry of Iloilo was still thriving. An American writer, John Bancroft Devins, who visited the market of Oton one day in 1901 reported:

> The Chinamen are there, as well as elsewhere, in great numbers. They furnish the cotton and the silk from which the cloth is woven, and they buy the cloth to sell in the markets throughout the island.[31]

Devins also noticed how the weavers had to work very hard because the Chinese controlled the textile business. He continued to say, "Seemingly every house we passed on the ride (from Iloilo to Oton) had a loom. As the cloth is sold cheaply, it is necessary to keep the hand loom busy to make a living."[32]

The Chinese and the Sugar Industry

Discouraged by the declining profitability of textile and attracted by the bright prospects of sugar, the Chinese *mestizos* of Iloilo put their capital in large-scale sugarcane planting, milling and sugar trading. In 1861 Loney reported:

> A good number of Iloilo *mestizos* have also invested in large tracts of fertile and well-situated lands on the coast of Negros.[33]

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[30] Jose Montero y Vidal, *El Archipelago Filipino* (Madrid: Imprinta y Fundacion de Manuel Tello, 1886), p. 23.

[31] John Bancroft Devins, *An American Observer in the Philippines, or Life in Our New Possessions* (Boston, New York and Chicago: American Tract Society, 1905), p. 278.

[32] *Ibid.*

[33] Loney to Farren, 10 July 1861, PRO FO 72/1017.

The *mestizo* families who moved to Negros from Iloilo were usually accompanied by their poor relatives and neighbors who worked in the *haciendas* either as tenants *(agsadores)* or farm-hands. In most cases, the migrating families did not give up their landholdings in Iloilo. They even maintained their old houses where their children lived while attending school in Iloilo and where the families stayed during special occasions like the town fiesta or the *semana santa* (holy week).

One Chinese *mestizo* from Iloilo who went to Negros and made good was Teodoro Yulo of Molo. He moved his family to Negros in 1870. He started by acquiring *haciendas* Concepcion, San Gregorio, San Carlos and Carmen in Binalbagan. Within several years he bought *haciendas* Ipil, Tagda, Pilar, Socorro, Linao and Bagacay in Hinigaran. Eventually Teodoro Yulo had a total of 75 sugarcane plantations. Like many other big *hacenderos*, he sent his children to college.[34] Two of his sons became provincial governors of Iloilo and one son became senator from Negros Occidental.

The contribution of the Chinese *mestizos* to the rapid development of the sugar industry could hardly be overestimated. As a group, they enjoyed an advantage over the Ilonggo planters and businessmen in that they had bigger capital, better business skills and wider business contacts. By the 1880's Panay and Negros had become the premier sugar-producing region of the Philippines and the port of Iloilo assumed its position as the No. 1 exporter of sugar. In 1885 Iloilo's sugar export was 109,609 tons as compared to Manila's 65,678 tons.[35]

The Chinese who came to Iloilo after the opening of the port to foreign commerce did not confine themselves to trading. Some of them went into farming and manufacturing. At first the Chinese, like other foreigners, were not allowed to own land. They circumvented this legal impediment by putting their interests in the names of their Filipino wives or of their Filipino partners some of whom were actually dummies. When the law prohibiting foreign ownership of land was later abolished, many Chinese invested their capital in land for sugarcane or abaca. After the abolition of the government monopoly on liquor, the Chinese also put up distilleries for rum and wine in Iloilo.[36]

It was not so easy for the Chinese to prosper in business in Iloilo. They had to compete with other foreign merchants who generally had bigger capital — British, Americans, Swiss, German,

[34]Francisco Varona, "Negros — Its History and People," *The Manila Chronicle* (Western Visayas Section), 16 June 1965.

[35]John Foreman, *The Philippine Islands* (New York: Charles Scribner's Sons, 1899), p. 295.

[36]Edgar Wickberg, *The Chinese in Philippine Life, 1850-1898* (New Haven and London: Yale University Press, 1965), p. 104.

French — and also with Spaniards, Ilonggos and *mestizos.* Many Chinese started in business very humbly: for example, as itinerant vendors peddling their wares from town to town. Through hard work and thrift, they saved enough money to start a *sari-sari (tianggi)* store and from there some of them were able to build business houses of considerable size. The Chinese also helped one another. It was for the purpose of mutual protection and of promoting their common interest that they organized the Kuantong Hui Kua (Cantonnese Association) in 1870.[37] In 1878 the Iloilo Chinese petitioned for and obtained the right to elect their own officials who would serve as liaison officers with the Spanish colonial bureaucracy.[38]

Because the port was in Iloilo, business naturally shifted from Molo to the capital town. After the termination of the *parian* in line with the liberalization of government commercial policy, the Chinese in Molo gradually moved their business firms to Iloilo to be near the docks. The transfer was especially hastened by a big fire that razed Molo on 3 July 1877.[39]

Iloilo and Jaro Became Cities

By 1886 there were 1,154 Chinese in Iloilo, not counting the Chinese *mestizos* who were more numerous, and they contributed plenty to the income of the government. In industrial tax alone, 18 Chinese paid the first class tax of \$100 each, 72 paid the second class tax of \$60, 138 paid the third class tax of \$30, and 26 paid the fourth class tax of \$12.40. But more than contributing to the government coffers, the Chinese helped push the growth of Iloilo so that in 1890 it was elevated to the status of a city by the Queen Regent of Spain.[41] The following year, 1891, Jaro was likewise made a city.[42] Iloilo was the only province to have two cities during the Spanish Period, thanks partly to its large Chinese and Chinese *mestizo* residents.

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37 *Ibid.*, p. 179

38 Omohundro, *op. cit.*, p. 16.

39 P.R. Verzosa (ed.), *Iloilo Handbook for 1934* (Iloilo: Iloilo Tourist Bureau, 1934), p. 31.

40 *Report of the Philippine Commission* (Washington, D.C.: Government Printing Office, 1901), v. 2, p. 441.

41 Wenceslao E. Retana, *Mando de General Weyler en Filipinas* (Madrid: Vda. de M.M. de los Rios, 1896), p. 271. The Royal Decree creating the city government of Iloilo was issued on 7 June 1889, but the government was inaugurated by Weyler on 7 February 1890.

42 Decreto del Gobierno General de 7 de Marzo de 1891. In Miguel Rodriguez Berriz, *Diccionario de la Administracion de Filipinas, Anuario de 1891* (Manila: Establecimiento Tipografico de J. Marty, 1891), v. 9, p. 152. Also in *Gaceta de Manila*, 23 Marzo 1891.

About 90% of the Chinese who came to Iloilo in the second half of the nineteenth century were Fukienese, of whom about 50% were from Chin-Kang (Chin-Chiang) county, Fukien. They carried such surnames as Tan, Uy, Sy, Ang, Chua, Go, Lim, Yu and Yap.[43] These family names still predominate among the Iloilo Chinese today.

Some Chinese made Iloilo the base of their operations that covered other cities of the country. A case in point was Francisco Yap Tico who had a combined commission agency and hemp-sugar exporting firm in Iloilo in the 1890's. By the turn of the century he had established branches in Manila and Cebu.[44]

One area where the Chinese also made good was financing or money lending. For instance, Lim Ponso was loaning money to sugarcane planters and *lorcha* operators in the 1890's. Within a dozen years he became one of the big sugar exporters in Iloilo.[45]

The first bank to open a branch in Iloilo was the Hongkong and Shanghai Banking Corporation in 1883.[46] It was followed by the Chartered Bank of India, Australia and China, the National Bank of China, and the Banco Español Filipino.[47] But even with four banks in operation the financial needs of the farmers, millers and traders could not be met due to the rapid growth of the sugar industry. Many Chinese took advantage of the situation by giving cash advances to sugarcane planters. And not only cash. The Chinese also supplied the draft animals, farm implements and supplies needed by the planters, on condition that they would sell their sugar to the Chinese. The supplies of food items and farm necessities usually took the form of credit at the Chinese stores. The Chinese, *mestizos* and Ilonggos who operated under this kind of financing scheme became known as "the monopolizers."[48]

In 1893, three years after Iloilo had become a city, it had 2,010 Chinese residents, the biggest outside Manila.[49] The following year the number dropped to 1,896, pro-

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[43]Wickberg, *op. cit.*, p. 172; Omohundro, *op. cit.*, p. 17.

[44]Walter Robb, "The Chinese in the Philippines," *Asia* (1921), p. 962, quoted in Wickberg, *op. cit.*, p. 87.

[45]Document No. 125, *Protocolos de los Instrumentos Publicos*, 1895, for the province of Iloilo. National Archives, Manila.

[46]Maurice Collis Wayfoong, *The Hongkong and Shanghai Banking Corporation* (London: Faber & Faber, Ltd., 1965), p. 101.

[47]*Report of the Philippine Commission* (Washington, D.C.: Government Printing Office, 1901), v. 4, p. 88.

[48]Varona, *loc. cit.*

[49]Wickberg, *op. cit.*, p. 169.

bably because some Chinese moved to Negros; but in 1898 the number rose to 1,958.[50]

The *Padrones de Chinos* of Iloilo in 1894 stated that most of the Cantonese in the city were cooks and shoemakers.[51] In the field of culinary art the Chinese certainly made lasting contributions. We only have to mention the famous Pancit Molo and La Paz Batchoy to appreciate the rich Chinese legacy in food preparation. Many dishes that Ilonggo housekeepers prepare today are of Chinese origin: chupsuey, lumpia, bihon, sutanghon, mami, siopao, etc.

The Philippine Revolution and the Filipino-American War that followed it dislocated business in Iloilo for about three years but the Chinese stayed on. Many leaders of the Revolution in Iloilo were descendants of the early Chinese. With the coming of peace and the new regime under the Americans, the Chinese continued to play an expanding role in the economy of Iloilo.

Concluding Statement

The Chinese first came to Iloilo centuries ago. Some just came to trade but over the years a large number had settled down, weathering initial prejudice, and at times open hostilities from the Ilonggos, as well as official persecution from the government. The descendants of those who married in Iloilo were assimilated by Ilonggo society so that after two or three generations they no longer considered themselves as Chinese but as Ilonggos, and were fully accepted as such. They were no longer derogatively called "Insik."

Whether the early Chinese came to Iloilo just for business or lived here permanently, they contributed immensely to Ilonggo life and culture. Many of their descendants became leaders in the various fields of human endeavor. Indeed, Chinese influence in Iloilo has been deep and pervasive. Today it can be seen in many an Ilonggo's fair skin, in the crops he plants, the tools he uses, the foods he eats, the games he plays, the customs he observes, and in a myriad other ways.

50 *Guia Oficial de Filipinas para el ano 1894* (Manila: 1894), p. 730.

51 Wickberg, *op. cit.*, p. 111.

TIME ALLOCATION AND FERTILITY BEHAVIOR OF MARRIED WOMEN IN FISHING COMMUNITIES OF ILOILO, PHILIPPINES*

Venancio B. Ardales

Introduction

Time is a basic and valuable resource which is available to all people. It is unique in that it is distributed equally to all members of society. How people use this resource can have important consequences for the distribution of outcomes of various kinds. This could be the reason for the increasing interest of social scientists in the study of time use.

Data on time allocation provides a range of benefits. They are considered indispensable for improving many social accounting systems, especially if they are supplemented by appropriate measures that specify the context in which activities take place. Moreover, information on time use provides a rich resource for analysis of a wide variety of behavioral topics. Examples of these behavioral topics are labor force participation, labor productivity, the production of household inputs (like child care and housing quality), marital stability, the use of leisure time, the dynamics of preference change, and the valuation of nonmarket time. Conditions like nutrition, health and mortality, particularly of small children, can be best explained when data on time use by the household members, particularly by the mother, are available (Juster and Stafford, 1981; Mueller, 1978). D' Amico (1980) who assessed the time-use behavior of young Americans stressed that how time is used provides a "unique mapping of the preferences and constraints confronting individuals as well as bearing relevance at the societal level to inferences regarding quality of life and related issues."

Even fertility researchers will stand to benefit from data on time allocation. The effect of the size and composition of a household on its capacity to generate income is one important aspect of fertility analyses. Time use data can be useful in determining the economic contribution of children to the family. It will also reveal under what conditions a large family size limits a woman's ability to contribute to family income, and under what conditions it increases her labor force participation (Mueller, 1978).

The general objective of this investigation is to find out how the

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married women in fishing villages of Iloilo, Philippines allocate their time as influenced by some demographic and socioeconomic factors. Stated in question form, the specific objectives of this study are as follows:

1. How much of the women's time is allocated to (a) household chores, (b) child care, (c) wage work, and to (d) leisure or personal activity?
2. What is the fertility behavior of these women?
3. How is their time use affected by the number and age of their children, and by the presence of household help (to include relatives living with them)?
4. How is their time allocation influenced by social and economic variables like level of living, education, occupation, distance of their workplace from home, their incomes and their husbands'?

Methodology

Research Techniques and Samples

The choice of a research technique is determined largely by the problem of the study, by the available resources (funds and manpower), and by the nature of respondent population (attribute complexity and geographical dispersion) (Simon, 1966; Lynch, et. al., 1974). Since the present study is exploratory in nature and considering the constraints in funds and the wide geographical dispersion of the respondents, the investigator decided to use the sample survey technique.

A two-stage sampling was used to arrive at the nine communities covered in this study. This was done by listing first of all the fishing municipalities of the province. From the list the three sample towns were randomly drawn. For each sample municipality a list was made of fishing villages. This was used as the sampling frame in the random selection of three barangays for each sample town.

The needed information were gathered by interviewing the 317 respondents who were randomly drawn and who willingly cooperated in the investigation. The size of the respondents was determined with the use of the following sampling formula (Lynch, et.al., 1974) and utilizing the five per cent level of sampling error.

$$n = \frac{NZ^2 \times p\,(1\text{-}p)}{Nd^2 + Z^2 \times p\,(1\text{-}p)}$$

Where Z is the value of normal variable (1.96) for a reliability level of .95; p is the largest possible proportion (.50), d is the sampling error, N is the population, and n is the sample size.

The 317 respondents were distributed to the nine sample villages in proportion to the total number of households in each community.

Procedure Used in Obtaining Time Use Data

Originally, it was planned to gather data on women's time use for the whole year so as to capture their yearlong time use behavior, which varies according to events in a year. Thus, the following questions were asked: How many hours in a day do you usually use in activity X? How many days in a week/month do you do activity X? How many months in a year do you do activity X? These questions were asked for the major activities which were considered in this study. To arrive at the total time use of the women for each activity in a year, her usual time use in a day is multiplied by the number of weeks or months in a year. Examination of results reveals an overestimation of actual time use behavior. Thus, it was decided to utilize in the analyses the reported usual time use data of the women for a single day. This is more accurate than the cumulated yearlong data but fails to capture the various time use pattern of the women in a year.

One important difficulty encountered in this study was the recording of time use in borderline activities (like playing with a child is either leisure or child care work) and in activities which are done simultaneously (like child care and cooking, tending a store while cooking and caring for children). For the first problem, the interviewers were instructed to probe the type of activity as perceived by the respondent (like playing with a child is to be considered leisure, not child care). For the second problem, there is no way out (except by constant observation which is very expensive and restricts the sample size) from double or triple recording of time use for two or three activities done simultaneously, like doing laundry while cooking and watching a small child. Thus, if one has to sum up the total time use of a woman the result would exceed her total waking hours.

The problems imply that the methodology for time use studies has not yet become well developed. There is a need, therefore, to do more studies in this area so as to come up with a methodology which will not be constrained by the problems mentioned and by other difficulties which bedeviled other time use investigations.

Results

The Respondents and their Households

Results of the present investigation point out that much needs to be done to improve the socioeconomic conditions of the women and their households. This is borne out by the findings that, on the average, the women had only seven years of completed schooling, only 37 percent of them were gainfully employed with monthly earnings of ₱195. Only 42 percent of their total (317) was affiliated with community organizations but their involvement in the activities of their organization was quite poor.

The conditions of the women's households were not any better. The dependents and the young outnumbered the working adults, and the women's fertility tends to be high. With an average of six persons per household, their average per capita income which is ₱70 monthly is quite low, although using six indicators they were found to be enjoying an "average" quality of life.

On the average, the respondents' age is 32 years, young enough to raise the four-children-per-woman average. The prospect is not very good for these women and their families considering that only 33 percent of them were practising family planning techniques.

Findings on Women's Time Allocation

Analysis of data on time use reveals that the biggest proportion of women's time is allocated to household chores[1] and child care[2]. Wage work[3] received less of their time while leisure/personal activity has the least share of their time budget. That household chores and child care get the lion's share of the women's time may be explained by the fact that 63 percent of the 317 women were not engaged in wage work, and those who work do their income-generating activities in or at least not far from their homes.

As we expected, it is the college-educated women who spend more time in wage work and less time in household tasks and child care than women of lower educational attainment. However, it is the women without formal education, or those who have reached primary level, who have more time for leisure or personal activity.

Relating time use and employment status, it was found that the average time spent by the unemployed for household chores does not differ much from that of the employed. This is so because most of the employed women work in or near their homes, thus, they still have time for household tasks and even for the care of their children. However, the unemployed have more time for child care and for leisure or personal activity.

Analysis of time use data by distance of women's workplace from home reveals that there is a negative association between the former variable and time spent in household chores, child care and leisure or personal activity; positive association between workplace distance and time use in wage work.

Data on time use and type of employment disclosed that women engaged in manual labor, personal services, handicrafts and in processing farm and marine products have a higher average time on household tasks than any other group of women classified by type of work. But it is the professionals and office workers who have higher average hours for wage work but less time for all other activities than any other group of women.

Analysis of time use data and income reveals that the association between women's income and time use in household chores and in child care is negative, while that

[1]Include food preparation, house cleaning, washing, ironing and sewing clothes.

[2]A household work but is treated separately in order to determine its individual effect on women's time use.

[3]Includes income-generating activities in and outside the house.

between income and time use in wage work and leisure/personal activity is positive. The same trend emerged when their husbands' incomes were analyzed with their time budget.

Relating time use and women's standard or level of living, it was found that the association between the latter variable and the time spent in household tasks and in child care is negative. The inverse is true between standard of living and time allocated to wage work, and leisure or personal activity.

Examination of time use data and the number and age of youngest child disclosed that both the latter variables affect the women's time allocation. The data seem to suggest, however, that it is the age of the youngest child which greatly determines how the women should allocate their time.

Contrary to expectations, women with household help have a higher average time in the care of their children than those without household help. This means that the care of young children is fully entrusted to household help, more so because their work (for women who are working) does not take them far away from their homes. As expected, women with household help have lower average time for household tasks but have higher average hours for wage work and leisure/personal activity than those without household help.

Comments and Recommendations

What do the findings of this study tell us? For the women who were studied and for their sisters in fishing communities of Iloilo province whose socioeconomic status approximates theirs', much of their time budget is allocated to doing household tasks and in caring for their young children. This, as confirmed by some respondents, is not by choice but is forced upon them by circumstances. If there were an opportunity, they would spend much of their time in productive or income-generating activities in order to augment the ever-insufficient incomes of their husbands. However, they do not want to neglect their home duties, particularly the care of their young children, whom they do not want to entrust fully to household help. This is a dilemma for these women. One way out of this dilemma is to provide the women with productive work which they can do in or near their homes. Cottage industries like shellcraft, bamboocraft, weaving, manufacture of native delicacies, backyard poultry and piggery are some of the productive work in which these women can engage. But for women whose economic condition is quite low, the lack of capital to invest in these projects is a major problem. This is where both the public and private agencies should come in. They can provide these people not only with financial support, but with technical assistance as well.

Results also inform us that women with college education, employed full time away from their homes earn high incomes but deprive their household members of much of their time. To some extent this affects the welfare of the household members, particularly the youngest. On the other side of the coin, however, by working these women are able to meet some of the daily needs of their households, to make use of their college training, to enhance their personalities, and to contribute significantly to the development of their communities. Although most people would say that their primary responsibility is to their families, they themselves prefer to work since "with inflation life is getting more and more difficult."

Recommendations

In terms of methodology, it is suggested that future studies should exhaustively cover all the activities of the women, not just for a day. As was mentioned elsewhere in this report, the use of time by women, particularly those working on farms or those engaged in fishing, vary during the year. The variation is the result primarily of the change in seasons. It is recommended, therefore, that a number of interviews, spaced throughout the year and to cover different seasons, be made so as to capture the time use of the women during the entire year.

Moreover, how the other members of the household budget their time to some extent, also affects the woman's time use. It is suggested that the time use of other household members be covered by future studies, for this would give better insight and a better perspective in analyzing how a woman allocates her time.

A bigger sample should also be considered by future studies on time use. Though expensive, this will provide a stronger foundation on which to base one's generalizations. Furthermore, studies on time allocation should not be restricted to fishing communities. Communities with different geographical and economic conditions should be included, for surely the time use pattern of people in these communities would be different from those in fishing communities.

For policy makers, it is recommended that in planning programs they should also look into the time use pattern of the people. Such knowledge will provide guidelines as to how the program should be carried out and how the people and their families would be affected by the program. In the long run, the main concern is that development programs should be implemented to serve and benefit the people, not the other way around.

REFERENCES

D'Amico, Ronald. (1980). "Time Use Research: A Methodological Study and Preliminary Findings." The Ohio State University.

Juster, Thomas F. and Frank P. Stafford. (1980). "A 1980 Study of Time Allocation Among American Households." Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor.

Lynch, Frank, Mary R. Hollnsteiner and Leticia Covar. (1974). *Data Gathering by Social Survey*, Trial ed., PSSC Social Survey Series, No. 2, Quezon City: Institute of Philippine Culture, Ateneo de Manila University.

Mueller, Eva. (1978). "Time Use Data." Population Studies Center, University of Michigan.

Simon, Julian L. (1969). *Basic Research Methods in Social Sciences: The Art of Empirical Investigation.* New York: Random House.

A BEFORE AND AFTER STUDY OF READING DIFFICULTIES OF FIRST YEAR TEACHER EDUCATION STUDENTS OF ILOILO SCHOOL OF ARTS AND TRADES*

Victoria S. Primero

In this study the major reading difficulties and weaknesses of first year teacher education students of Iloilo School of Arts and Trades were identified. Then the students were given a remedial reading program focussed on these difficulties.

Conducted at ISAT, the study was participated in by fifty-eight students chosen from 298 freshmen of the teacher education department. The English instructor of the five sections was requested to identify the slow readers from each section and she recommended fifty-eight students. Twenty-three students who responded to the invitation to attend the special reading sessions conducted by the researcher became the members of the Remedial Group. For each of the twenty-three, a "twin," or a student who matched him/her in the reading pre-test scores, sex, age and mental ability, was found. These twenty-three "twins" comprised the Comparison Group. The twelve others did not come for remedial help because they either had conflicts in schedule or lacked time for remedial sessions. Neither group had previously read the materials used for testing their reading skills. The students' ages ranged from 16 to 19 years, and the average was 18 years.

Answers were sought for the following questions:

1. What are the major reading difficulties and weaknesses of first year teacher education students of ISAT?
2. Will a simple but organized remedial reading program, easily set up with the facilities available in schools like ISAT, bring about some significant improvement in the reading abilities of first year teacher education students?
3. What changes will be noted after this remedial reading program is carried out?
4. Will the students be benefited by the remedial techniques and strategies of reading introduced?

***An abstract of a masteral thesis done at Central Philippine University in 1983 for the Master of Arts in English. degree.**

PROCEDURES USED

1. A preliminary test was first administered on January 3, 1980 to all the fifty-eight students to familiarize the students with the instructions, format and procedures of the tests. In this preliminary test, the students were made to do all the exercises by themselves so that they would do independently the exercises in *Reading for Meaning*, No. 8. After the preliminary test, the test papers were scored to identify the students' difficulties and weaknesses.

2. Six other pre-test exercises similar in format to the preliminary test were given to the students on January 3 and 4, 1980. The first three major errors, (those with three highest frequencies) of each student were identified to enable the researcher to group the students having the same major errors. Students' test papers were also analyzed to identify particular skills in which they were weak. The students' grade levels were also determined.

3. Students having the same three major errors were grouped. Four groups were formed to facilitate the giving of remedial exercises to each group.

4. The Remedial Group of twenty-three students was given remedial reading exercises for three months, about three to four exercises per month. Each student was given ten to twelve remedial reading exercises, four for each major difficulty.

5. Thirty-nine exercises were given to the Remedial Group during the first three months. Then they were given the first post-test consisting of six exercises. The means of their post-test scores were computed and the significance of the difference between mean pre-test scores and mean post-test scores for each of the skills was determined.

6. A few weeks after the first post-test, the second post-test, consisting of another set of six reading exercises taken from the same book, was given to the Remedial Group. This was done to ascertain whether the students made improvement in their reading scores and to help the researcher compare the persistence of errors of the students in the first and second post-tests.

7. The same first and second post-tests given to the Remedial Group were given to the Comparison Group, ten months after the pre-test was given them. Their mean scores for the pre-test and for the post-test were computed. Also their mean scores for the pre-test 1 and that of the post-test 2 were compared. The difference between the two means of the Remedial Group was compared with the difference between the two means of the Comparison Group . The t-ratio was computed to find out whether the difference between the two differences was big enough or significant.

8. To appraise the mental ability of the students, the *Otis Self-Administering Tests of Mental Ability* (Higher Form) was given to all the fifty-eight students. Their IQ's were correlated with the extent of change in the students' new scores.

9. The Registrar's records were looked into for data on the students' age, sex, average grades in all high school and college English subjects for the researcher to assess the scholastic ability of the students under study especially in English.

10. An inventory was given to the students and their answers to this inventory were analyzed to determine the relationship of their other activities and experiences with their performance in reading. On the basis of students' answers to the inventory, the researcher classified the students as those having meager, fair and very rich experiential background.

The study revealed that the Remedial students were from two to three grade levels below their expected reading grade level. The boys in the Remedial Group made significant improvement in the following reading skills, in this order: getting the main idea, getting the facts, choosing the best title, drawing conclusions, getting word meanings, and in making an outline.

The girls in the Remedial Group made significant improvement in the following reading skills, in this order: getting the main idea, choosing the best title, getting the facts, making an outline, getting word meanings, and drawing conclusions.

Neither the boys nor the girls of the Comparison Group made any significant improvement in the six reading skills tested despite the ten-month regular classroom instruction before they were given the post-tests.

On the basis of the findings, the following recommendations are made:

1. Teachers of reading should give help to students with reading difficulties as soon as their reading problems are discovered.

2. Reading materials suited to the age, sex, reading level and mental ability of students should be provided.

3. Teachers should teach students how to use context clues when confronted with unfamiliar words.

4. Schools should provide supervised study periods for students who have reading problems.

5. College English teachers should diagnose students' reading difficulties at the start of the school year.

The following problems have been suggested for further study:

1. A study similar to this done on a wider scale and for a longer period of time.

2. A more refined study to include the use of instruments to measure auditory and phonetic skills of first year college students.

3. A study using a remedial reading program based on interests of remedial students.

4. A study which will identify reading difficulties in the students' native language (Hiligaynon).

5. A study on students' reading skills including inferences, logical relationships and predicting or anticipating outcomes.

JOB SATISFACTION IN RELATION TO JOB PERFORMANCE OF CLINICAL INSTRUCTORS OF THE PRIVATE COLLEGES OF NURSING IN THE CITIES OF REGION VI*

Ma. Brenda Sarria-Sanagustin

This study was undertaken by the writer who has had many years of experience as a clinical instructor and who felt that clinical instructors' job satisfaction has affected their work as educators.

The theoretical structure which supports this research study, stems from the assumption that generally there is some positive correlation between job satisfaction and job performance but they are not absolutely related.

This study dealt with a descriptive survey on the degree of job satisfaction and its relationship with job performance among the clinical instructors of the private colleges of nursing in the cities of Region VI (Western Visayas).

Specifically, it aimed to answer the following questions:

1. To what extent are clinical instructors satisfied with their job in terms of the following factors: (a) mental and physical exertion, (b) relations with associates, (c) relations with immediate superior, (d) job security, advancement and finances, (e) interest in, liking for emotional involvement, (f) job information, training and status, (g) physical surroundings and work conditions, (h) future goals and progress towards goal, and (i) past achievement and accomplishment when respondents were categorized as college based and university based and when taken as a whole?

2. Is there a relationship between clinical instructors' job performance and job satisfaction?

The participants were seventy-five clinical instructors of the nine colleges of nursing in the cities of Region VI during school year 1982-83. They comprise ninety-five per cent of the seventy-nine clinical instructors employed in these colleges at the given time.

The Johnson's Job Satisfaction Scale was used to gather data. The scale included eighty-three items under the nine factors of job satisfaction, namely: (a) mental and physical exertion, (b) relations with associates, (c) relations with immediate superior, (d) job security, advancement and finances, (e) job interest, liking for and emotional involvement, (f) job information, training and status, (g) physical surroundings and work conditions, (h) future goals and progress towards goal, and (i) past achievement and accomplishment.

The validity and reliability of the instrument was established by Ruiz in 1979. The coefficient alpha was used to determine the reliability of the scales and point biserial coefficient of correlation was used to determine the validity of the items in the scales. To test the appropriateness of the items in the scale to the activities and situations in nursing, an agreement ratio (AR) of the deans' opinions were ob-

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tained.

The second instrument was the 1975 Revised Job Performance Rating Scale for teachers. The scale consisted of thirty-five items under two parts: (a) instructional competencies, and (b) social and personal competencies.

The Kruskall-Goodman gamma coefficient was used to measure the relationship between job performance and the nine factors of job satisfaction. Because the test of the significance was non-directional, the two tailed test was used. The obtained z was compared with the tabled z at the 5 per cent level.

The null hypothesis was: There is no relationship between clinical instructors' job performance and job satisfaction.

Among the seventy-five respondents, 4 per cent were males and 96 per cent were females. Fifteen per cent were over thirty-nine years old, 47 per cent were 30-39 years old, 39 per cent were 20-29 years old. Eighty-three per cent of the clinical instructors have had more than a year of experience. The majority, at least 57 per cent, were over five years in their service. Seventy-nine per cent were married, 28 per cent single and one was widowed. Seventy-nine per cent had masteral units, 12 per cent had bachelor's degrees, seven per cent had completed the academic requirements for the masteral degree and 3 per cent had BSN-RM (Registered Midwife). Eighty-six per cent were on "permanent" status and 14 per cent were probationers.

The percentages of respondents in the S-VS and DS-VDS groups when treated altogether, regardless of whether college based or university based were taken.

There is a good indication that the clinical instructors were satisfied and/or very satisfied in their jobs. The percentages of those "Very Satisfied" and "Satisfied" ranged from 49 per cent to 85 per cent.

Of the nine determinants, Job Information, Training and Status and Physical Surroundings and Work Conditions have the highest percentage of "Very Satisfied" and "Satisfied" respondents. It was 85 per cent. Job Security, Advancement and Financial Considerations have the highest percentage of "Dissatisfied" and "Very Dissatisfied" respondent. It was 49 per cent.

In the computation of gamma coefficient of the relationship between job performance and each of the nine factors of job satisfaction, the findings showed that of the nine factors, only one factor (interest in, liking for and emotional involvement) showed a slight but significant relationship with job performance. The rest of the factors, (mental and physical exertion; relations with associates; relations with immediate superior; job security, advancement and finances; job information, training and status; physical surroundings and work conditions; future progress towards goal, and past achievement and accomplishment) indicated negligible and insignificant relationship when respondents were taken as a whole.

In the computation of gamma

coefficient of the nine colleges, the findings showed that only College No. 4 showed a slight but significant relations between job performance and job satisfaction in terms of relations with immediate superior. For this institution, the null hypothesis for no relationship between job performance and satisfaction in this aspect was rejected.

The analyses of the preceding data provided conclusions of the study, which would serve as answers to the questions presented.

In all the nine determinants of job satisfaction there is a good indication that clinical instructors in general were satisfied in their job. There is a high degree of satisfaction shown by clinical instructors regarding job information, training and status and physical surroundings and work condition. There is slight degree of satisfaction shown by clinical instructors in regard to job security, advancement and financial considerations.

The clinical instructors showed dissatisfaction with the following situations and conditions: (1) income that they derive from work, and (2) recognition from their superior.

The clinical instructors felt that they have selected the wrong occupation.

There were negligible and insignificant relationship between job performance and job satisfaction in terms of: (a) mental and physical exertion, (b) relationship with associates, (c) relations with immediate superior, (d) job security, advancement and finances, (e) job information, training and status, physical surroundings, (f) work conditions, (g) progress toward future goals, (h) past achievement and accomplishment, for all clinical instructors of the nine colleges of nursing.

The clinical instructors from College No. 4 having high degree of satisfaction in terms of relations with immediate superior tend to have higher performance ratings.

Based on the conclusions derived from the findings of the study, the following recommendations are proposed:

1. That the findings of this study be given as feedback to clinical instructors and administrators of the colleges of nursing included in this study to:

   a. give the institution the information on the sources of satisfaction and dissatisfaction of the clinical instructors of their school in particular and of all clinical instructors in general; and

   b. let the administrators know what satisfies and dissatisfies their clinical instructors so that they will maintain and enhance those elements which contribute to satisfaction and minimize, if not eliminate, those conditions which lead to dissatisfaction.

2. The administrators are encouraged to give some form of recognition for jobs well done to satisfy the instructor's ego need.

3. A study similar to the present be undertaken in all colleges of nursing, both private and government using variables: tardiness, ab-

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A STUDY OF PERSONNEL MANAGEMENT PRACTICES AND PROBLEMS IN THE HOTEL INDUSTRY IN THE CITY OF ILOILO*

Abe Faldas Gigare

The purpose of this research was to determine the practices and problems in personnel management among hotels in the city of Iloilo. A structured type of questionnaire was used to obtain data. The questionnnaire looked into the practices and problems regarding the (1) recruitment and selection; (2) induction and orientation; (3) training; (4) promotion and dismissal; (5) labor turnover; (6) handling of salary administration; and (7) benefits and services extended to employees.

An interview was conducted for the purpose of checking on the consistency of the responses for some of the items in the questionnaire.

This study covered all fifteen hotels which had five or more full-time workers in 1981.

It was found out that the data gathered through the questionnaires were concurred with by the hotel employees who were interviewed.

Findings

Some of the significant findings of this investigation were:

1. All fifteen hotels depended on the services of employment agencies to supply them with needed applicants for jobs in the hotel.

2. The most pressing problem in recruiting personnel was the lack of qualified workers. Large hotels, however, encountered more problems, in recruiting personnel.

3. All of the fifteen hotels included in this study had an orientation program but only two large hotels made use of the formal method of orientation. Hotels were not agreed as to who was responsible for orienting new employees.

4. The length of probationary period of employment specified by hotels in the city of Iloilo ranged from less than one month to six months for all categories of employees.

5. The merit rating system was the most popular tool for promotion followed by the length of service rendered to the hotel. Only two large hotels gave tests to employees, the result of which were used as one of the bases for promotion.

6. Labor turnover rate was greater in small hotels (31.1%) than in large hotels (8.54%). The average labor turnover rate of 12.6 per cent in hotels included in this study was considered normal.

7. The most common benefit extended by hotels to their employees was the giving of bonuses. While all large hotels extended three or more fringe benefits and services to their employees, three small hotels afforded only one of these fringe benefits and services.

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8. Hotels with salary rates higher than the mean salary rates in all categories of hotel personnel in the city of Iloilo were all large hotels.

Conclusions

From the findings of this investigation, the following were some of the conclusions derived:

1. The hotels relied on the services of employment agencies to supply them with applicants, but with varying frequency. The hotel management usually considered mainly the work experiences of the applicants in deciding whom to accept for employment.

2. The responsibility of orienting new employees tended to be the work of the manager and/or organization head in small hotels and of the immediate supervisor and/or head in large hotels.

3. The length of probationary employment ranged from one month to six months in every category of workers.

4. Merit rating and length of service tended to be used to supplement each other in determining which worker in the hotel should be promoted.

5. When deciding on the starting salary of the new employees, hotels relied heavily on the work experiences of the new employees.

6. The most pressing problem among hotels in recruiting personnel was the lack of qualified workers.

7. Hotels tended to have difficulty in retaining personnel after training.

8. The work force in the hotel industry in the city of Iloilo tended to be stable in large hotels.

Recommendations

a. *Recommendations for improvement of present practices*

1. Hotels in the city of Iloilo should develop the channels and contacts with school heads and guidance counselors. Through these channels and contacts, hotels may inform schools of the manpower requirements and qualifications they need.

2. In addition to orienting him about specific job, the hotel personnel should be informed of the hotel's role in the community, personnel policies of the hotel, and other topics which can help the incoming employee to understand the purpose for which the hotel is operating.

3. Small hotels should develop "productivity oriented" criteria in selecting personnel to minimize, if not to totally eliminate, cases on personnel dishonesty, laziness, discourtesy and intoxication.

b. *Recommendations for further study*

1. A detailed study on the personnel training and development program in hotels.

2. A larger study of personnel management practices and problems in hotels to include other hotels in the Western Visayas.

LEADER BEHAVIOR OF ELEMENTARY SCHOOL PRINCIPALS PERCEIVED AND PREFERRED BY TEACHERS IN THE PROVINCE OF NORTH COTABATO*

Helconida T. Calapardo

The purposes of this study were to find out the perceived and preferred leader behavior of the elementary school principals in the eleven districts of North Cotabato and to discover if there were factors which were related to those principals' behavior as perceived by their teachers. Specifically, the study aimed at finding answers to the following questions:

1. Is there any significant difference between the leader behavior of each elementary school principal as perceived by his own teachers and the leader behavior preferred by them?

2. Is there a significant difference between the task-orientation mean score and the mean of the person-orientation score of each principal, as preferred by the teachers?

3. Is there a significant difference between the mean of the scores of task-oriented and the mean of the scores of person-oriented leader behavior of the principal, as perceived by the teachers?

4. On the basis of the perception of teachers of what are task-oriented and person-oriented leader behaviors, which principals can be typologized as (a) high in both dimensions, (b) low in both dimensions, (c) high in task-oriented leader behavior and low in person-oriented ones, (d) low in task-oriented leader behavior and high in person-oriented ones, and (e) middle-of-the-road?

5. Are such variables as (a) age, (b) marital status, (c) length of service under present administrator, and (d) educational attainment of teachers, associated with the:

1) teachers' perception of leader behavior in their principals?

2) teachers' preference of leader behavior in their principals?

The term "leader" as used in this study was used with the word "principal" who was represented by the "administrator" of the respondents. These "administrators" as used in this study were the various principals in the twenty-three public elementary schools in North Cotabato during the school year 1981-1982.

Instrument Used. The main instrument used in this study was the *Leader Behavior Attitude Scale* in the *Halpin Modern Form* consisting of two scales, namely: (1) *Person-oriented Leader Behavior Scale* (POLBS) and (2) *Task-oriented Leader Behavior Scale* (TOLBS), each consisting of thirty items which were prepared by the group enrolled in the Seminar in Administration: Leadership during the second semester of school year 1980-

*An abstract of a masteral thesis done at Central Philippine University in 1984 for the Master of Arts in Education degree.

1981 under Dr. Macario B. Ruiz.

The original questionnaire consisted of a list of 246 items which were rewritten several times after these had been classified into "person-oriented" and "task-oriented" items by "judges" or practicing administrators comprising of deans and department heads of Central Philippine University. The semi-final draft consisted of 93 items with agreement ratios (AR) ranging from .70 to 1.00. After the pre-oral examination of the researcher, the 60-item questionnaire was reduced to 50 items due to some duplications.

The sample. The samples consisted of 274 teachers with at least two years of service under their present administrators from the twenty-three public elementary schools in the eleven districts of North Cotabato. The thesis committee advised the researcher to get thirty principals around the radius of Mlang, but she was able to administer her questionnaire to only twenty-three schools due to critical condition of peace and order in the areas where the seven other schools were situated.

Administration of the questionnaires. Once the subjects were identified from each school where the researcher administered her questionnaire, each of them was personally contacted by the researcher with the aid of her husband and given a questionnaire to fill up after they had been properly oriented as to the purpose and importance of the study and given directions what to do with the questionnaire. Retrieval of the questionnaires required a day after the distribution. Administration and retrieval of the questionnaires were finished in two weeks' time.

Data Analysis. The perception and preference of the teachers-respondents were based on the weighted scores they obtained on the fifty leader behavior items. The weighted score of an item is the sum of the four subscores of an item. A subscore is obtained by multiplying the frequency of a response by its weight.

Statistics used were the means, SD, SE_D, SE_M, and CR to determine how significant the difference between the leader behavior of each elementary school principal as perceived by his own teachers and the behavior preferred by his own teachers.

To determine the typology or category of the principals involved in the study the obtained SPeS for the task-oriented and the SPeS for the person-oriented were transformed.

To determine the correlation between the two dimensions in the twenty-three schools involved, Pearson Product Moment Correlation (r) was computed.

In order to determine what factors were associated with the perceived and preferred leader behavior of the principal, the Kruskall Goodman ordinal association gamma (C) was used for age, length of service under present administrator, and the educational attainment of teachers. The point-hiserial r (r_{pbi}) was used for marital status. A Z-value of the 5 per cent level of significance was sought before association between the perceived leader behavior and any of the variables was declared.

Findings

After the examination of facts and figures from the study, the following were the findings:

1. In each of the other three schools, the difference between the leader behavior of each elementary school principal as perceived by his own teachers and the leader behavior preferred by his own teachers was significant at the 1 per cent level.

2. In each of the other four schools, the difference between the teachers' perception and preference of leader behavior of the principal was significant at the 5 per cent level.

3. In each of the other sixteen schools, there was no significant difference between the perception and preference of the teachers of leader behavior of the principals.

4. The difference between the mean of the scores of task-oriented leader behavior and the mean of the scores of the person-oriented leader behavior of the principals as perceived and preferred by the teachers was not significant.

5. Principals differed according to the perception of teachers. Two of the principals were high in person-oriented and task-oriented leader behavior; two were low in task-oriented but middle-of-the-road in person-oriented leader behavior; one was low in person-oriented but middle-of-the-road in task-oriented leader behavior; fourteen principals were middle-of-the-road; and four principals were low in both dimensions of leader behavior.

6. The perception of the teachers of leader behavior of the principals was not associated with the age, marital status, educational attainment, and length of service of teachers under their present administrator.

7. The preference of teachers of leader behavior of principals was significantly associated with their age at the 5 per cent level.

8. The preference of teachers of leader behavior of the principals was not associated with the marital status, educational attainment, and length of service of teachers under their present administrator.

Conclusions

Based on the findings, the following conclusions were drawn:

1. In general, the perception of teachers of leader behavior of the principals was lower than the preference of teachers of the leader behavior of the principals.

2. There seemed to be a similarity between the means of the scores of task-oriented leader behavior and the means of the scores of person-oriented leader behavior as perceived and preferred by the teachers.

3. Out of twenty-three principals evaluated by their teachers, many of them showed minimum concern on task and person dimensions of the leader behavior.

4. Neither the age, marital status, educational attainment and length of service of teachers under their present administrator was related to the perception of the teachers of their principals' leader behavior.

5. The preferred leader behavior of the principals seemed to be associated with the age of teachers. The teachers tended to prefer principals who are high both in task-oriented leader behavior and person-oriented leader behavior.

6. Neither the marital status, educational attainment, and the length of service of the teachers under the present administrator was associated with the preferred leader behavior of principals.

Recommendations

In the light of the conclusions of the study, the following recommendations are presented:

1. Since the sample used in this study was limited to teachers only, it is recommended that the same study be conducted to include the principals themselves and their superiors to make it more comprehensive.

2. The findings of this research on the perceived leader behavior of principals were low on task and person dimensions. The researcher recommends that the elementary school principals in the province of North Cotabato should undergo training in leadership so as to upgrade skill and show much concern on both person and task dimensions.

3. It is also recommended that a similar study be conducted in high school and college departments both in public and private institutions to widen the coverage of the study and to make a sophisticated research which will provide a basis for definite steps for the improvement of leader behavior in all educational institutions.

4. Other variables such as sex, civil status, length of service and educational qualification of the leader in the organization should be included in further studies.

5. The present version of the instrument should be revised so as to include more items and to subject all these items to a more sophisticated evaluation process.

A STUDY OF THE RELATIONSHIP BETWEEN THE DECISION-MAKING STYLE OF THE ELEMENTARY SCHOOL PRINCIPALS AND THEIR TEACHERS' JOB SATISFACTION IN TWO DISTRICTS IN THAILAND*

Songsri Ariyawanakit

This study attempted to determine the relationship between the decision-making styles of elementary school principals, as perceived by their teachers, and the teachers' job satisfaction. The schools studied were from Khate Pratumwon, Bangkok, and Amphur Muang Samutsakhon, Samutsakhon, Thailand. Specifically, it sought to answer the following questions: (1) What decision-making style is most frequently perceived? (2) What is the decision-making style most frequently preferred by the teachers in Khate Pratumwon and Amphur Muang Samutsakhon? (3) Is there a relationship between the decision-making style perceived and preferred by teachers in Khate Pratumwon and in Amphur Muang Samutsakhon? (4) What styles are preferred by the teachers who perceive a given decision-making style? Specifically:

a) What styles are preferred by teachers who perceive the "tells" style?

b) What styles are preferred by teachers who perceive the "sells" style?

c) What styles are preferred by teachers who perceive the "consults" style?

d) What styles are preferred by teachers who perceive the "joins" style?

e) What styles are preferred by teachers where the principals' styles cannot be determined?

(5) Is there any relationship between the principals' decision-making styles and teachers' job satisfaction?

The Job Satisfaction Survey used twenty selected items from the instrument used in Prias' thesis, "A Study of the Relationship Between Teachers' Job Satisfaction and School Climate," which was taken from Johnson's Job Satisfaction Scales. The questionnaire on the decision-making styles of the principals was adapted from Pariñal's thesis, "A Study of the Iloilo Public Elementary School Teacher's Morale in Relationship to the Different Administrative Styles at the Point of Measurement." The answers to each question were categorized into "tells," "sells," "consults," and "joins," rather than using Pariñal's administrative categories.

The questionnaire, prepared in English and translated into Thai, was criticized for clarity by bilingual readers, and the instrument was also subjected to a pretest to determine its validity for Thai teachers.

*An abstract of a masteral thesis done at Central Philippine University in 1983 for the Master of Arts in Education degree.

The questionnaire was then administered to four hundred fifty-five elementary teachers from the two districts in Thailand. To convert teachers' scores to the "satisfied-dissatisfied" rating, the perfect score for the number of items was multiplied by 100 per cent, 80 per cent, 60 per cent, 40 per cent and 20 per cent to determine the upper limits of each category of the satisfied-dissatisfied ratings. The decision-making styles were recorded in the Very Satisfied, the Satisfied, the Neutral, the Dissatisfied, and the Very Dissatisfied columns. The number and percentage of respondents which fell under each of the five categories were taken for each of the five styles for each district. Then the number and percentage of respondents belonging to the Satisfied and Not Satisfied groups were reported. The X^2 test was used to determine the relationship between styles for each district. Then the number and percentage of respondents belonging to the Satisfied and Not Satisfied groups were reported. The X^2 test was used to determine the relationship between the principals' decision-making style as peceived by their teachers' job satisfaction. To determine the extent of relationship, the contingency coefficient was computed.

The perceived decision-making styles of the principals were categorized according to the responses to the questionnaire. The most prevalent perceived decision-making style of the principals was determined in terms of a score for that style of five points or above. The anchor method was used to break a tie between two or more styles. For ties that could not be broken, when the perceived decision-making styles could not be determined, the styles were categorized under "undetermined."

The relationship between teachers' perceived and preferred decision-making styles in the two districts was determined by using the rank difference coefficient of correlation (rho).

The significant trend of the teachers' preferred style of those who perceived a given style was determined by using the chi-square test.

The following were the major findings of the study:

1. The most frequently perceived decision-making style of principals in Khate Pratumwon is "tells," followed by "joins," "undetermined," "consults," and "sells"; while in Amphur Muang Samutsakhon, "joins" comes first, followed by "undetermined," "tells," "consults," and "sells," respectively. In the combined districts, "joins" is the most frequently perceived style.

2. The rank of the perceived styles for the individual districts differs between Khate Pratumwon, an urban district, and Amphur Muang Samutsakhon, which is rural.

3. Agreement in the ranking of preferred decision-making styles was observed in both districts, but not in the perceived styles.

4. "Joins" was found to be the most preferred decision-making style of teachers in the combined districts. "Joins" was followed

by "consults," "undetermined," "sells," and "tells."

5. The most frequently preferred decision-making style is the "joins" style, regardless of the style teachers perceived.

6. There is no significant correlation between ranks assigned by the teachers of the two districts to the perceived decision-making style, although both groups of teachers gave rank four to "consults" and five to "sells."

7. There is a tendency of the teachers in both districts to be satisfied with their jobs if the decision-making style is perceived as "joins." This is shown by the "substantial" or "marked" relationship between job satisfaction and decision-making style.

The recommendations of this study are as follows:

1. Administrators should try to use more of the "joins" or participative decision-making style, since this style is associated with more satisfied teachers.

2. Some principals may fail to use the style that relates to teacher satisfaction because they do not know how, so they should be offered training in administration and decision-making.

3. To maximize successful and fruitful participation, teachers should be given proper education on how to participate effectively in decision-making. Such knowledge will not only increase the scope of participation but can also initiate a feeling of involvement in decision or the feeling of belonging in the decision-making process.

4. Administrators of the participating schools should be informed of the results of the study, in the hope that after two years a follow-up study will reveal a change in the principals' decision-making styles.

For further study:

1. It is recommended that studies of decision-making be conducted to determine the extent to which types of schools, rural or urban, public or private, influence the perceived decision-making style of principals.

2. It is recommended that a study be conducted on the relationship of the principals' training or academic background to their decision-making styles.

3. Since not all decision-making can be participated in by subordinates, a study should be conducted to determine what decisions can be made jointly.

PREPARATION AND VALIDATION OF READING MATERIALS FOR GRADES V AND VI *

Zita Delfino-Alon

This project, "Preparation and Validation of Reading Materials for Grades V and VI with An Accompanying Teacher's Manual" grew out of the need of Region VI for varied, interesting, and suitable instructional materials tailored to the needs and experiential backgrounds of its pupils. The purpose of these materials is to supplement the basic readers in the classroom either for independent reading of the pupils or for reading instruction.

The materials are six reading selections, five of which were originally written by the researcher and one, adapted. Every selection is followed by test exercises on vocabulary, word recognition, and comprehension.

The materials have undergone several stages of analysis in their preparation and validation.

All the materials were developed on the basis of a conceptual framework. The writer was constantly reminded about the following considerations as she developed the materials: subject or content areas of interest to the readers; the presentational style that they prefer, the specific reading skills to be developed, and the infusion of desirable values.

The materials were kept within the reading level of the pupils for whom they were intended by controlling (1) the vocabulary and concept loads, (2) the language structures used, and (3) the length of the passages.

The reading skills, objectives and concepts developed in the materials, and the language structures employed are those prescribed by the Elementary Learning Continuum and other curriculum guides and materials currently used in public elementary schools.

The readability of the selections was ascertained with the use of the Fry Readability Formula.

A sample of Grade V and VI pupils were asked to read orally the portions of the developed reading materials to determine the usability of the materials. The results revealed that the pupils for whom they are intended found the selections readable.

The results of the trial use of the materials were analyzed to determine (1) the validity of every test item on the basis of its difficulty and discrimination index and the correlation between item score and the total score, and (2) the reliability of the whole set of the testing instrument upon retesting.

The few items which did not show strength initially were revised and retested. Those that did not improve were eliminated.

The test exercises were found out to be highly reliable.

[1]Abstract of a thesis for Master of Arts in Education degree, done at Central Philippine University, 1984.

AN EXPERIMENTAL STUDY ON THE EFFECT OF FEEDBACK FROM TEACHERS ON THE BEHAVIOR OF THEIR PRINCIPALS *

Pablo Amerila Hilario

The main purpose of this study was to find out the effect of feedback from teachers on the behavior of their principals. For statistical analysis the following were the research hypotheses:

1. Principals receiving feedback from teachers would show significant change in behavior as compared to principals not receiving feedback.

2. Significant improvement in behavior would result after the feedback treatment in each of the four dimensions of the principals' behavior: human relations, leadership, personal qualifications and attributes, and physical characteristics and personality traits.

3. Significantly, more principals would react positively than negatively to feedback from teachers.

4. Sex, educational training, administrative experience, and age would be related to the amount of change in the behavior of principals.

The study was conducted from October, 1982 to February, 1983, in randomly-selected elementary schools in the division of Antique. The subjects, randomly chosen, were thirty-one principals who composed the experimental group and thirty-one principals who composed the control group. Four hundred eleven (411) teachers were randomly selected as respondents to a prepared questionnaire. This instrument for the evaluation of the behavior of the principals consisted of fifty-one items grouped into the four aforementioned behavior dimensions.

After the pretest, only principals in the experimental group were given feedback. Twelve weeks after the feedback, a posttest with the use of the same instrument was administered to the teacher-respondents who participated in the pretest.

The .05 level of significance was sought for the difference between pretest and posttest results.

The findings supported these subsequent conclusions:

1. Feedback from teachers significantly and positively changed the behavior of principals as a group.

2. Significantly, more principals reacted positively than negatively to feedback from teachers.

3. Young principals and those with less administrative experience were significantly and positively sensitive to feedback as compared to the older principals with longer experience in administrative responsibility.

4. Feedback from teachers significantly resulted in desirable or positive change in all dimensions of the principals' behavior.

(To page 40)

*An abstract of a masteral thesis done at Central Philippine University in 1984 for the Master of Arts in Education degree.

A STUDY OF THE INCIDENCE OF MEDICATION ERRORS AND THE PROCEDURES VIOLATED OR EVENTS THAT PRECEDED THE COMMISSION OF MEDICATION ERRORS OF NURSING STUDENTS IN A COLLEGE OF NURSING IN ILOILO FROM THE SCHOOL YEAR 1976 to 1984*

Nanette G. de Leon

This research investigated and analyzed the medication errors and the procedures violated or neglected or the incidents that preceded the commission of medication errors made by the nursing students under study while serving their internship at the base hospital. More specifically, it sought to answer the following questions:

1. What are common medication errors committed by nursing students of a College of Nursing in Iloilo from 1977 to 1984 as revealed in the incident report?
2. What are the procedures violated or incidents that preceded the commission of these medication errors?
3. What procedures violated or incidents that preceded the commission of medication errors that tend to be cited in connection with each error ?
4. Do the four-year program and the five-year program students differ significantly in:
   a) the incidence of medication errors they committed?
   b) in the procedures violated or incidents that preceded the commission of medication error that they cited in connection with each error?

The findings of this study may increase understanding about medication errors committed by nursing students. These will help in the formulation of curriculum for the training of nursing students and proper programming of affiliation work in order to minimize the errors.

The subjects of this study consisted of nine hundred ninety-three nursing students from class 1977 to class 1984, 578 students on the five-year program and 415 nursing students on the four-year program.

The method used in the gathering of data was the analysis of incident reports accomplished by these nursing students during their clinical training at the base hospital. The analysis of data for the school year 1976 to 1984 showed that out of 993 nursing students a total of 173 students from both groups committed medication errors.

Of the 173 medication errors committed by nursing students in both groups fifty-five or 13.25 per cent were made by the four-year program and one hundred eighteen or 20.42 per cent were committed by those in the five-year program.

*An abstract of a masteral thesis done at Central Philippine University in 1984 for the Master of Arts in Nursing degree.

The first five medication errors committed by the five-year group were also the first five errors of the four-year group. These were the following:

1. Omission of dose
2. Wrong dose
3. Wrong schedule
4. Wrong patient
5. Wrong medicine

Omission of dose was committed by eighteen or 32.72 per cent of the four-year group and by thirty-three or 19.07 per cent of the five-year group.

Wrong dose was committed by eight or 4.62 per cent of the four-year group and twenty-six or 15.02 per cent of the five-year erring students. Out of these thirty-four or 19.65 per cent, thirteen or 7.5 per cent were overdosage and twenty-one or 12.13 per cent were underdosage.

Wrong schedule was committed by ten or 5.78 per cent of the four-year group and twenty-three or 13.29 per cent. of the five-year students.

Wrong patient was committed by six or 3.45 per cent of the four-year students and by seventeen or 9.82 per cent of the five-year students.

Wrong medicine was committed by ten or 5.78 per cent of the four-year group and nine or 5.20 per cent of the five-year group.

The errors committed infrequently (committed by no more than five in the combined group) are reported only for the whole group not for each group.

Gave medicine which was temporarily withheld was committed by five students or 2.89 per cent in the whole group.

Failure to record medicine given committed by two students or 1.15 per cent.

Incorporating additive to wrong infusion committed by two students or 1.15 per cent both from the five-year program.

Each of the following errors was committed only by one student or .57 per cent of the whole group but not by the same student:

1. Wrong route
2. Giving medicine without observing precaution.
3. Giving medicine that has been discontinued.
4. Giving medicine not indicated.

Conclusions

From the analysis of the data the following conclusions were made:

1. The most common errors committed, ranking one to five are:

a) Omission of dose
b) Wrong dose
c) Wrong schedule
d) Wrong patient
e) Wrong medicine

2. The most common procedures violated or incidents that preceded the commission of medication errors are the following:

a) Before preparing or giving medicine check carefully doctor's order, kardex, medicine sheet, medicine card, medicine board and medicine box.

b) Re-check the patient's identity before giving the medicine.

c) Check the strength of the medicine before giving the medicine.

d) Check periodically the rate of intravenous infusion.

e) Gauge intravenous infusion carefully.

3. The procedures violated or incidents that preceded the commission of medication errors that tend to be cited in connection with:

a) **Omission of dose**

1. Before preparing or giving the medicine check carefully the doctor's order, kardex, medicine sheet, medicine card, medicine board and medicine box.
2. Always put patient's medicine in his medicine box.
3. Give full attention to the preparation of medicine.

b) **Wrong dose**

1. Check the strength of the medicine before giving the medicine.
2. Before preparing or giving medicine check carefully doctor's order, kardex, medicine sheet, medicine card, medicine board and medicine box.
3. Read medicine literature before preparing the medicine.

c) **Wrong schedule**

1. Before preparing or giving medicine check carefully doctor's order, kardex, medicine sheet, medicine card, medicine board and medicine box.
2. Gauge intravenous infusion carefully.
3. Check periodically the rate of intravenous infusion.

d) **Wrong patient**

1. Re-check the patient's identity before giving the medicine.
2. Before preparing or giving the medicine check carefully doctor's order, kardex, medicine sheet, medicine card, medicine board and medicine box.

e) **Wrong medicine**

1. Before preparing or giving medicine check carefully doctor's order, kardex, medicine sheet, medicine card, medicine board and medicine box. 2. Read label of medicine before preparing medicine. 3) Be sure the medicine issued by the pharmacist is not placed in wrong bottle.

4. The Spearman Rank Coefficient of Correlation was used to determine a) whether the ranking of the various medication errors in the five-year group is similar to that in the four-year and b) whether the ranking of incidents that preceded the errors in the five-year group is similar to that of the four-year group.

The null hypothesis was that there is no significant relationship between the ranking of various medication errors in the five-year group and that in the four-year group. The point of rejection at five per cent level of significance on one-tailed test is 1.64. Since the obtained rho is .674825 and its z-value of 2.238130 is more than 1.64, the decision is to accept the alternative hypothesis that there is significant relationship between the ranking of various medication errors in the five-year group and the four-year group.

The other null hypothesis was that there is no significant relationship between the ranking of incidents that preceded the errors in the five-year group and that in the four-year group. The point of rejection at five per cent level of significance on one-tailed test is 1.64. Since the obtained rho is .26 and its z-value of .74 is less than 1.64, the decision is to retain the null hypothesis that there is no significant relationship between the ranking of incidents that preceded the errors in the five-year and of the four-year group.

5. There was less incidence of errors during the second year of the four-year group or the third year of the five-year group. A sudden increase of medication errors was observed in the third year of the four-year group or the fourth year of the five-year group. A sudden drop on the last year of internship.

Recommendations

Based on the findings of the study the investigator recommends the following:

1. The following should be instituted in the nursing curriculum.

   a) A separate subject called Pharmacology and Therapeutics should be offered. It is very important that a separate subject be offered to the students so that intricacies in the administration of medicine can be studied better.

   b) A longer period of hospital affiliation should be required and clinical instructors should give closer supervision of the students specially in the administration of medication.

2. Strengthen the orientation program for the nursing students on administration of medication before they fully assume the responsibility of medication nurse.

3. Conferences attended by the clinical instructors, hospital repreentatives and student representatives should be held to discuss medication errors and administration of medication.

4. Student nurses should be informed about the errors in medications committed in the clinical areas so that they may be forewarned and they can take precautionary measures to avoid similar errors.

5. Identification bands should be placed on the arms of the patients to avoid mistakes due to misidentification of patients.

6. More demonstrations should be given to the students on the computation of doses and the gauging of intravenous infusion to avoid errors in dosage.

7. Clinical instructors should always check the charts before they go off to be sure that the students have recorded the medicine given and those not given.

8. More careful follow-up should be done on students who have committed medication errors and precautionary measures be taken so that repetition of the errors will be prevented.

9. It is recommended that nursing audit should be devised particularly in administration of medicine with the idea of expanding to all other nursing departments when this is possible. The nursing audit could be used for appraisal of nursing performances and of the operational value of the system and as a basis for improvement.

10. A Drug, Pharmacy or Therapeutic Committee may be formed in the hospital. This committee is important because it would help formulate and recommend policies and practices which will ensure that the best use is made of available drugs and therapeutic agents in terms of optimum utilization and minimal potential for harm to the patient.

11. There is a need for further study of the procedures violated/incidents that preceded medication errors so that similar situations in the clinical area will be avoided.

12. In order to lessen medication errors The Sally Thomas and Meriam Newton safety measures in administering medications should be adopted by the Colleges of Nursing.

13. Colleges of Nursing should adopt the Guide formulated by the ANSAP and PNA and the Guidelines Relative to the Safe Use of Medications in Hospital prepared by The Board of Trustees of the American Hospital Association and the Executive Committee of the American Society of Hospital Pharmacists.

An Experimental Study . .
(From page 35)

On the basis of the above findings, the following recommendations are given:

1. Teachers' feedback should be used by the principals to improve their leadership performance.

2. More feedback studies should be conducted with different population groups, using sophisticated experimental designs and reliable measuring instruments to convince everyone that feedback is not only necessary but also beneficial.

Job Satisfaction . . .
(From page 24)

senteeism and turnover. It is further recommended that the study be undertaken by the Research Committee of the Philippine Nurses Association local chapter, the Council of Administrators in Nursing Education (CANE) or even the Association of Deans/Principals of the Philippine Nursing Schools/Colleges.

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