Iberoamericana, Nordic Journal of Latin American Studies
Vol. XXI:1-2, 1991, pp. 67-85

Self-directed Learning Skills in Honduras: A Comparative Study

*Paul J. Guglielmino & Robert P. Vichas**

Introduction

In this article, levels of readiness for self-directed (or auto-managed) learning among individual managers and nonmanagers are explored in two cities in Honduras (Central America): Tegucigalpa and San Pedro Sula. Data from the Honduran sample are cumulated; aggregated results are compared with a similar previous study conducted in the United States. Before presenting and discussing the results and conclusions drawn from the Honduran study, the authors introduce and define the concept of self-directed learning, review selected literature, and describe the test instrument and methodology employed in this particular field study.

Significance of Self-Directed Learning

Origins of self-directed learning, an ancient concept, can be traced to the Socratic method of learning. However, in modern times, the most widely accepted definition of self-directed learning has been offered by Malcolm Knowles, a well-known authority in the field. He describes self-directed learning as

> "...a process in which individuals take the initiative with or without the help of others in diagnosing their learning needs, formulating their learning goals, identifying the human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating their learning outcomes." (1975, p. 18).

People who must function effectively and work productively in an environment of rapid technological change must also continuously learn and

* Department of Management/International Bussiness, Florida Atlantic University, Florida.

DOI:https://doi.org/10.16993/ibero.228

develop skills and knowledge to avoid job obsolescence. In his book, America in the Global '90s, Austin H. Kiplinger states:

> "Lifelong learning, training and retraining are essential to productivity, achieving individual potential and international competitiveness. With the volume of information doubling every two years and change taking place at a faster rate, periodic upgrading of education will become routine." (1989, p. 161).

Presently there appears to be a trend manifest in some western countries: Individuals are taking more responsibility for management of their own work in at least some industrialized societies. For instance, a number of U.S. and European companies in recent years, especially detectable among global organizations, have eliminated some levels of management in order to streamline their organizations, integrate lower level managers into the strategic decision-making process, and push authority and accountability in key decision areas down to lower levels of the organizational hierarchy. Consequently, self-directed employees, who not only can manage their own work and time but also can manage their own learning and skill development, are more valuable to the organization and should be in greater demand than those employees who respond best to highly structured, more formalized, and, hence, more costly training processes.

The importance of identifying individuals within an organization, who have developed the discipline necessary for self-directed learning and self-management of their job, can be summarized by these key words: productivity and competitive advantage.

Productivity reflects the ability of an enterprise not only to control costs, but to keep costs appropriately low to assure a continuing high degree of competitiveness in regional and global markets. John Naisbitt, the well-known author of Megatrends, wrote:

> "In a world that is constantly changing, there is no one subject or set of subjects that will serve you for the foreseeable future, let alone the rest of your life. The most important skill to acquire now is learning how to learn." (1982, p. 142).

In other words, a person must become self-directed in managing his own acquisition of knowledge and skills and to auto-prepare for anticipated future environments.

Some factors which led Naisbitt and others to this conclusion are:

a) the rapid rate of technological change;
b) changing job responsibilities of the work force from structured work

environments to unstructured ones through the use of self-managing teams;
c) a rising demand for higher levels of productivity and quality.

Current research suggests that individuals who have developed a high level of self-directed learning ability excel in rapidly changing jobs that require a high degree of problem solving ability and a high degree of creativity.

Background on Self-Directed Learning

The modern age concept of self-directed learning can be traced to the philosophical English language essays on individualism, which appeared during the latter eighteenth and throughout the nineteenth century.

Certainly the notion of individualism has always been considered a rudimentary precept of the North American mindset, and, historically, has been axiomatic in Christian and Jewish religious writings. Max Lerner described individualism as the highest and most celebrated of American attitudes; but he expressed concern that it was being "squeezed out" in modern society.

Most public education in the American continents has not traditionally encouraged self-directed learning, but in recent years managers of U.S. firms have found such essential to survival in a demanding environment.

Certainly, successful entrepreneurs in both North and South America are typically self-directed learners. During the past 60 or more years many of the how-to-be-successful genre of books (such as those by Napoleon Hill) have stressed the critical link between self-direction in learning and success in life and on the job.

Malcolm Knowles describes the self-directed learner as having

> "... a readiness to learn, a problem-centered approach and internal incentives such as self esteem." (1975, p. 26).Knowles advocates that self-direction is the best way to learn, concluding, "The 'why' of self-directed learning is survival of the individual and the survival of the human race." (1975, p. 16).

Knowles' book on the subject contains the following assertions:
1. Self-directed learners learn more, retain information longer, and better use knowledge.
2. Newer developments in U.S. education put more responsibility on self-managed learning.
3. Formal education should develop skills of inquiry.(1975, p. 14-15).

However, the real test of self-directed learners is whether learning occurs outside of the formal academic process.

For example, Tough wrote that a limitation of most studies of participation in learning is that they focused on formal instructional activities, usually under the sponsorship of an academic institution.

He wrote that the literature of adult learning describes the archetype adult learner as one who diagnoses his own needs, sets his own goals, chooses his own learning experiences, and measures his personal accomplishments relative to his initial objectives. 1971, p. 93).

Tough later noted that about 90 percent of all persons initiate at least one major deliberate learning effort per year and five efforts on average. Most of these are work-related and only 20 percent are professionally guided. (1971, p. 146).

In a review of studies on interviews, Cross concluded:

> By synthesizing findings across a number of interview studies, we can conclude that between 80 and 90 percent of the [U.S.] adult population typically conduct five self-directed learning projects per year and spend just about 100 hours on each project. That adds up to an impressive 500 hours per year, or 10 hours per week, for the average adult learner. (1978, p.1).

Ajougu added another dimension to the discussion when he suggested:

> To prevent executive training from degenerating into mere academic pedantry, executive educators have to assume the role of integrator of training and learning resources, rather than the depositor of didactic authority-a role which does not permit the trainees active participation in a learning situation. (1982, p. 5-8).

Self-directed learning is applicable, therefore, to employees at any level in the organizational hierarchy. For the organization, which strives to reduce training costs, the self-directed learner is not only more economical to train because he requires less structure or formalization of the learning process, but he proceeds faster with his training.

From an organizational perspective, greater efficiencies in training and productivity can be achieved, and the learning curve greatly steepened, when the organization is staffed with proportionately more self-directed learners. For the organization seeking to promote individuals, the self-directed manager can be expected to seek innovative approaches to business problems.

Berg wrote,

> "The fact is that self-instruction has much to offer in technical and skills training. It can reduce training time, increase long-term training effectiveness,

improve motivation and promote individual responsibility." (1979, p. 3).

Nevertheless, not everyone is sufficiently self-disciplined to manage his own learning, especially in work environments.

Roberts wrote,

> "There is some evidence that a small minority of persons cannot function effectively in situations requiring self-directed learning." 1986, p. 23.)

In his book on successful commodity trading, Vichas stressed the necessity of self-managed learning. He wrote:

> "Success centers on acquiring abilities associated with technical and fundamental analysis, self-training to sculpt a winning attitude, and, most importantly, insight to recognize opportunities..." (1975, p. 319).

Is self-direction in learning keyed to successful management? According to Paul Guglielmino,

> "Success today and tomorrow requires managers to become creative, innovative entrepreneurs, and success in that role requires the skill of learning in a self-directed way. Only those who can consciously design their own learning can cope with constant change." (Zemke, 1981, p. 28-29).

In a major study on managers in Ireland, Jones and Cooper (1980) documented several factors related to avoiding obsolescence of managers. The most significant factors were:

a) a positive perception of one's own learning ability;
b) individual assumption of responsibility for one's ownlearning;
c) continuous self-education (formal and informal).

There are interesting parallels between their list and Lucy M. Guglielmino's description of the characteristics of a self-directed learner:

> "Highly self-directed learners exhibit initiative, independence and persistence in learning; they accept responsibility for their own learning ...; they are capable of self-discipline and have a high degree of curiosity; they have a strong desire to learn or change and are self-confident; they can organize their time." (Guglielmino, L. & P., 1986).

If self-directed managers tend to be more successful, how might these individuals be identified within an organizational environment and singled out for further training and promotion? Does a tested mechanism or instrument for measurement exist?

Self-directed Learning Readiness Scale

Margarones (1962) discussed the need for an instrument to identify students who could manage independent study. Alf (1972) later developed a model for a transition structure between traditional and self-managed learning situations. Lucy Guglielmino (1977) subsequently developed a measurement tool, the Self-Directed Learning Readiness Scale (SLDRS), in the form of a questionnaire, to evaluate an individual's readiness for self-managed learning. This instrument has since been employed extensively in academia and has been used in some major studies in industry as well.

A 58-item instrument designed to gather data on learning preferences and attitudes towards learning, the SDLRS was developed by Lucy Guglielmino based on information provided by 14 authorities in the field who had participated in a Delphi study. Responses are recorded on a 5-point Likert scale. It has been administered by over 200 organizations around the world and has been translated into Spanish, Italian, French, German, Japanese, Chinese, and Finnish from the original English.

Of the several important studies conducted in business and government, which used the SLDRS, results have been analyzed to determine the extent of correlation between an individual's self-directed learning readiness and key factors, such as:

1. Level of management in the organizational hierarchy.
2. Sex.
3. Level of formal education.
4. Race.
5. Previous performance in the organization.
6. Culture.

A large private U.S. utility company participated in a study employing the SLDRS and administered the questionnaire to 753 managers and non-managers. Respondents in this study had a mean SLDRS score of 240, compared with a mean of 214 for other adult populations tested. The following major findings summarize conclusions drawn by those researchers:

a) Top level managers had the highest mean scores.
b) There was a positive correlation between SLDRS scores and outstanding performance when the job required a high degree of creativity.
c) There was a positive correlation between SDLRS scores and outstanding job performance when the job required a high degree of problem-solving

abilities.
d) There was a positive correlation between SDLRS scores and outstanding job performance when the job required a high degree of change.
e) There was a positive correlation between SDLRS scores and level of formal education completed. (Guglielmino, P. & L., Long, 1987).

Based on results of this study, the researchers concluded that individuals with high SLDRS scores are more likely to be high level performers in jobs which are rapidly changing or require creativity and problem-solving ability.

The Honduran Study

For the first study of this type conducted in a Latin American country, Honduras was chosen for several reasons:

1. Despite proximity to the United States, most Hondurans tend not to gravitate toward the United States (with the exception of some business travelers and occasional shoppers), as much as Mexicans or Colombians, for example.
2. Among Central American republics, Honduras has remained the most isolated, culturally and economically.
3. Although the country has a well developed private sector, management technology is at a level not atypical of developing countries.
4. Exports are predominately agricultural products; imports are largely manufactured goods.
5. Internal transportation and external commercial shipping are at a low level of development.
6. Very few Hondurans speak English or any language other than their native Spanish.

Consequently, Honduras represents a fairly insular laboratory for measuring and comparing differences in SDLRS scores. If there are significant differences in scores between respondents from a developed country such as the United States and an isolated economy such as Honduras, the differences may be partially attributed to cultural and educational isolation. On the other hand, if scores appear similar, then there is a stronger case for concluding that self-directedness is not necessarily culturally based.

Honduras, situated in the middle of the Central American chain, and about one-fourth the size of Sweden, supports a population of over 5 million

persons. The climate, subtropical in the lowlands in cities like San Pedro Sula, is temperate in the mountains where the capital, Tegucigalpa, is located. The country is mostly mountainous. The predominately Roman Catholic population is roughly 90 percent mestizo, a mixture of European and Indian. The composition of the economy is approximately 62% agricultural, 20% service, and 12% manufacturing.

Honduras ranks among the poorest countries in the Western Hemisphere with a 1989 per capita income of approximately ECU 85 (ECU equivalent). (The local currency is the Lempira and for many years was pegged at L2 = US$1; but the black market rate in 1989 for commercial transactions was roughly L3.5 = US$1 in Tegucigalpa, the capital, and approached L4 = US$1 in San Pedro Sula.) The inflation rate is about 20% per year, and unemployment has averaged around 20%.

Although Central America was united politically for a brief period following independence from Spain in 1821, the union was short-lived due to the diversities prevalent among the five countries. Even today significant cultural and economic differences among these small countries in Central America make unification problematical.

Just as the Central American countries are diverse, regions within the small country of Honduras suggest a degree of distinctness. Because of cultural diversity, differences of SDLRS scores may arise when scores between cities are compared.

The capital city of Honduras, Tegucigalpa, located in the mountains, retains elements of its colonial antecedents. The city remains conservative in terms of dress, life style and social fabric. Although the Pan American Highway passes through other capital cities of Central America, it bypasses Tegucigalpa. However, the capital is air linked with the rest of Central America and the United States. Consequently, exports and imports from and to this region of the country typically must pass through the capital. Service businesses are therefore a major part of the economic makeup of this national seat of government. San Pedro Sula, in the low coastal region north of Tegucigalpa near the Caribbean Sea, is not far from the English speaking country of Belize and the Spanish speaking country of Guatemala. From San Pedro Sula, connected to the rest of the world through its airports and seaport, daily flights to Miami carry foreign tourists and commercial representatives. As a general rule, the style of business is relaxed and casual. Sula is dominated by light and medium manufacturing.

Because some differences in culture appear to exist between these two cities, it is hypothesized that samples from each of the two cities may score somewhat differently on the SDLRS.

Inter-City Comparisons

In 1989, the Self-Directed Learning Readiness Scale was administered to groups of managers and non-managers in Honduras. A sample of managers and non-managers was taken from the capital of Tegucigalpa (n=50), another sample from San Pedro Sula (n=20): a total Honduran sample of 70.

The Spanish version of the questionnaire was used for both groups. The original questionnaire was translated from English into Spanish and back-translated. Additionally, one of the authors, who is bi-lingual, administered the questionnaires in Honduras, answered questions and explained to respondents any terms which were not clearly understood. However, at no time before completing the questionnaire did respondents know the exact purpose of the study.

Questionnaires were administered to these two disparate groups in order to determine demographic aspects of the sample. Respondents were asked to indicate if they were educated in the United States; if they were members of a non-management, management, or professional group; what age group they belonged to; the level of formal education attained; what race they belonged to; what their last formal work evaluation was; the level of creativity and problem solving ability that was required in their jobs; and the amount of change that the job was undergoing.

An analysis of the groups tested from Tegucigalpa and San Pedro Sula appears in Table 1.

Table 1
Comparison of Scores Between Tegucigalpa and San Pedro Sula

	Tegucigalpa	San Pedro Sula
n=	50	20
SDLRS Mean	184.7	185.5
Variance	106	50.7
Standard Deviation	10.3	7.1
Maximum Score	211	196
Minimum Score	157	174

The two groups were asked a series of questions relating to their demographics, such as whether they were formally educated in the United States, what kind of work group they were a member of at this time, and their

age, highest level of education completed, and race.

Responses appear in Table 2.

Table 2
Demographic Differences of Respondents (Number of Responses)

		Tegucigalpa	San Pedro Sula
Educated in U.S.?	Yes	2	6
	No	12	13
	No reply	36	1
Group:	Non Mgr.	15	0
	Supervisory	12	1
	Mid-Level Mgr.	8	0
	Professional	9	16
	Owner/Exec.	3	1
Age:	<25 yrs. old	7	2
	25-35	35	12
	36-45	7	4
	46-55	1	1
Education:	Elementary	2	0
	High School	9	1
	B.A.+	7	18
No reply		32	0

Data in Table 2 indicate that both groups were primarily educated outside the United States: Only 4% of the group from Tegucigalpa were educated in the United States, while 31.6% of the group from San Pedro Sula were educated in the United States. This is illustrated in Figure 1.

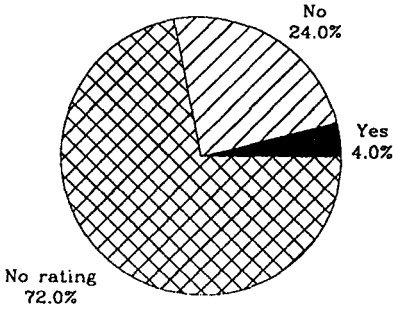
The United States was chosen for this education question for two reasons:

1. Although wealthier Latin American families traditionally had sent their children primarily to Spain and secondarily to France for post-secondary school education, today the United States probably outranks Spain for those seeking a university degree and overshadows all other countries for Latin Americans seeking a business degree.
2. The original SDLRS reference study was based on U.S. data.

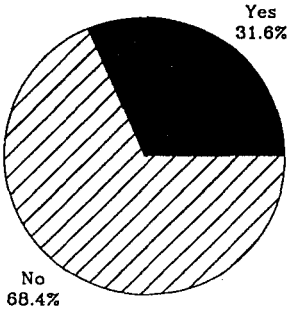
Fig. 1: Education of Respondents by City

U.S. EDUCATION

Were you formally educated in the United States?



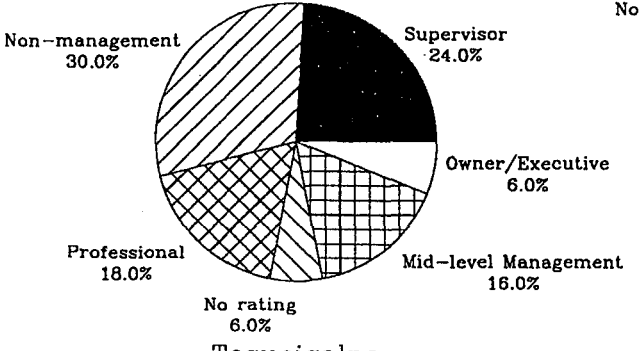
Tegucigalpa



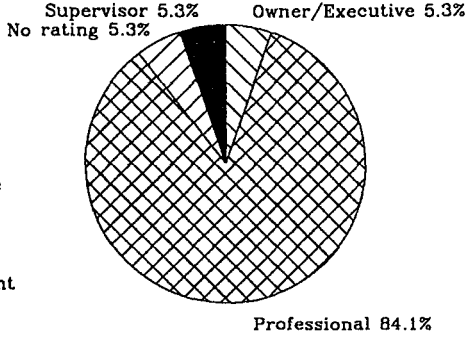
San Pedro Sula

Fig. 2: Position Within Organization
By City
WORK GROUP

Please indicate the group you are a member of at this time



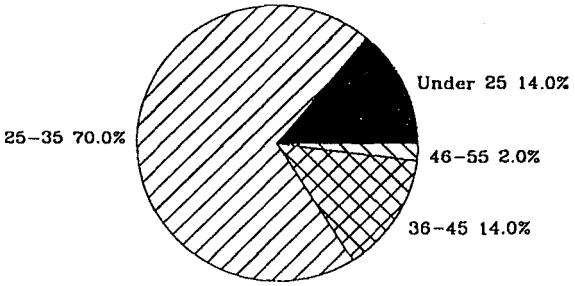
Tegucigalpa



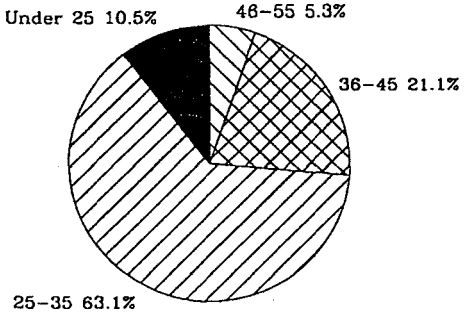
San Pedro Sula

Fig. 3: Age of Respondents in Each City

AGE



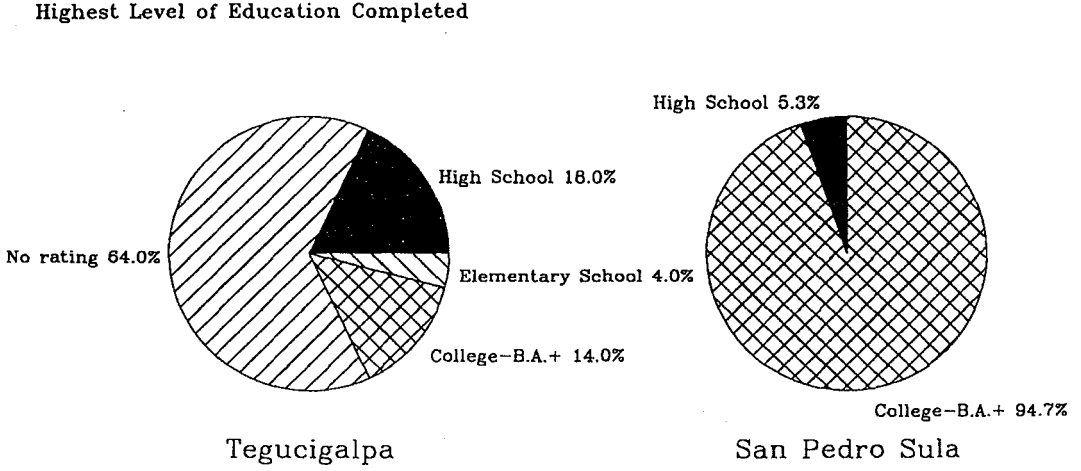
Tegucigalpa



San Pedro Sula

Fig. 4: Educational Level of Respondents
By City

EDUCATION



The group from Tegucigalpa were rather evenly divided among levels of management. Twenty-four percent were at the supervisory level, 16% at the mid-level of management, 24% either professional or owner/executive, and 30% non-management. On the other hand, the group from San Pedro Sula were almost all professional or owner/executive (90%). The two groups had a fairly similar age distribution. The pie charts in Figures 2 and 3 depict these differences and similarities. However, the educational background of the two groups differed considerably. For example, of the group that was tested from Tegucigalpa, only 14% had a college degree or higher education, while 94% of the group from San Pedro Sula had a college degree of more education completed. See Figure 4 for educational level of respondents by city.

Aggregated Data for Honduras

Following an analysis of responses of individuals from each city in the study, this section of the paper will represent a brief analysis of the aggregated data. These two samples fairly represent the entire country of Honduras. Although n=70 may seem like a limited sample, recall that the population of the entire country barely exceeds five million and that nearly two-thirds of the population, being tied to low technology agriculture, would tend to be less affected by SDLRS measures. This point is especially significant when comparing Honduran results to scores from industrialized countries such as the United States.

One hundred percent of the respondents indicated that they were Hispanic. The composition of the total group (n = 70) was as follows:

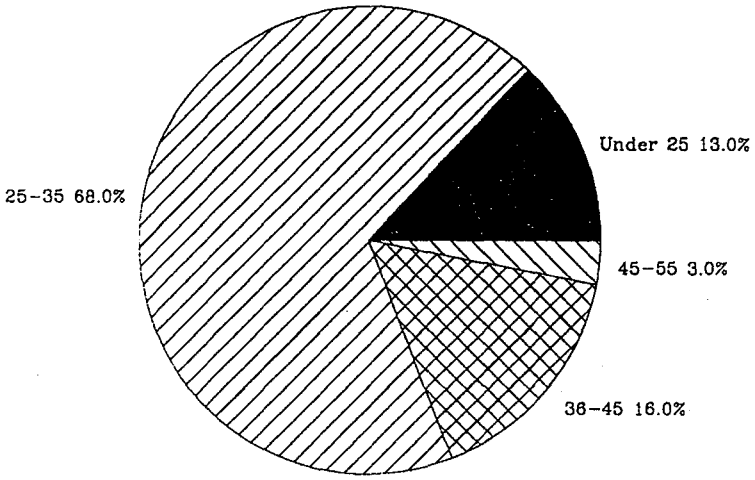
Non-managers	30%
Supervisors	24%
Managers	16%
Professional	18%
Owners	6%

The total sample (n = 70) had the following make up in terms of age:

Under 25	13%
25-36	68%
36-45	16%
46-55	3%

Fig. 5: Age Distribution
of Total Honduran Sample

AGE DISTRIBUTION



Honduras

An examination of the mean SDLRS scores of the two samples suggests the following conclusions. First, there was no significant difference between SDLRS means of these two groups ($p > 0.10$). However, in comparing the Honduran SDLRS means to a sample of United States managers, a significant difference emerges ($p < 0.005$).

This result suggests that Honduran managers in this sample have not developed the same degree of readiness for unstructured learning environments, as U.S. managers, and prefer structured learning environments to unstructured ones. The mean SDLRS score for the total Honduran sample was 187. The variance was 50.78, while the standard deviation was 9.45. The minimum score was 174; the maximum score was 196.

According to the percentile rankings that were developed in the United States study, the Honduran mean score would place the sample in the 13th percentile in terms of readiness for self-directed learning. This would position the group two standard deviations below the mean for U.S. adults. Managers in the U.S. sample (n=753) had a mean score of 240, which placed them in the 83rd percentile. Consequently, these results indicate a significant difference between the self-directed learning readiness skills of individuals in the Honduran and U.S. samples.

Further Research and Study

Since this was a relatively small sample of Honduran managers, the findings of this study must be qualified when making generalized comparisons concerning differences between Honduran and U.S. managers. Additional research would be productive. If, in fact, the data continue to show significant differences in learning styles between these two groups of managers, then an analysis of why these differences exist would prove interesting. For example, is school-teaching style a factor that augments these differences? How does culture endow these differences? If culture is a factor, which cultural characteristics are most relevant? These questions suggest avenues of possible future research.

Undeniably, with a rapid rate of technological change, individuals who function in this type of environment must be able to adjust to these innovations effectively in order to compete successfully in the workplace. With unrelenting emphasis on cost control, productivity, and quality, organizations will tend to compensate best those individuals who can self-manage their learning and their work. By the same token, those countries lacking a core of individuals capable of self-directed learning may be poor competitors in a global market.

Consequently, it may be argued that the gap between richer and poorer countries would be expected to widen with increasing globalization of markets and more intense competition among global players. On the other hand, an argument can be advanced that globalization of education should tend to result in a narrowing of this economic gap. These issues, of course, while beyond the purpose and intent of this initial baseline study, represent a broadened dimension to the discussion of economic disparities.

REFERENCES

Ajougu, M. O. *Methodological dynamics in educating business executives and administrators.* HRD International, 1982, v.4 (No. 2), 5-8.

Alf, H. A. *Development of the self-directed structure for self-directed learning readiness scale* (doctoral dissertation), University of Georgia, 1977.

Berg, E. *Self-instruction in technical and skills training.* Training and Development Journal, 1979, v.33 (No. 8), 3.

Crook, J. *A validation study of the self-directed learning readiness scale.* Journal of Nursing Education, 1985, 24, 264-279.

Cross, K. P. *The adult learner.* Washington, DC: American Association for Higher Education, 1978, No. ED171 887.

Finestone, P. *A construct validation of the self-directed learning readiness scale with labor education participants* (doctoral dissertation), University of Toronto, 1984.

Guglielmino, L. M. *Development of the self-directed learning readiness scale* (doctoral dissertation), The University of Georgia, 1977.

Guglielmino, L. & P. *Self-directed learning in business and industry: An information age imperative.* In H. Long, et al, Self-directed learning: Application and theory. Lifelong learning research/publication project, Dept. of Adult Education, University of Georgia, 1987, Ch. 6.

Guglielmino P.J. & L.M. *An examination of the relationship between self-directed learning readiness and job performance in a major utility* (unpublished research report), 1982.

Guglielmino, P.J. & L.M., Long, H.B. *Self-directed learning and performance in the workplace.* Higher Education, 1987, 16, 303-317.

Jones, A., & Cooper, C. *Combatting manager obsolescence.* Oxford, Eng., Phillip Allan Publishers, 1980.

Kiplinger, A.H. *America in the global 90's.* Washington, DC: Kiplinger Books, 1989.

Knowles, M. *Self-directed learning.* New York: Association Press, 1975.

Long, H.B., & Agyekum, S.K. *Guglielmino's self-directed learning readiness scale: A validation study.* Higher Education, 1983,12,77-87.

Long, H.B., & Agyekum, S.K. *Multitrait-multi-method validation of Guglielmino's self-directed learning readiness scale.* Proceedings of the 25th annual adult education research conference, 1984, 194-198.

Margarones, J.J. *Critical requirements of independent study based upon an analysis of critical incidents as reported by students and instructors* (doctoral dissertation), 1962.

Naisbitt, J. Megatrends: *Ten new directions transforming our lives.* New York: Warner Books, 1982.

Roberts, D.G. *A study of the use of the self-directed learning readiness scale as related to selected organizational variables* (doctoral dissertation), The George Washington University, 1986.

Vichas, R.P. *Getting rich in commodities, currencies or coins.* New Rochelle, NY: Arlington House, 1975.

Zemke, R. *Learning to learn: Survival skills for the 80's manager.* Training/HRD, 1980, 18, 6-8.

Zemke, R. *Self-directed learning: A must skill in the information age.* Training/HRD, 1982, 19, 28-30.