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FEATURED ARTICLES

PERCEPTION OF QUALITY OF LIFE OF ELDERLY PEOPLE: A SELF-ADMINISTERED QUESTIONNAIRE

Dr. Lizzette Rojas and Dr. Flordeliz Serpa



Abstract

In order to examine the perception regarding the quality of life of a sample of older people receiving services at a non-profit organization in Puerto Rico during 2010, a Quality of Life Questionnaire was administered to a non-probability sample of voluntary subjects. The self-administered questionnaire consisted of 50 closed-ended questions with multiple choice and Likert scales. A Quality of Life Scale was developed and it consisted of five sub-scales: independence/functional living, emotional health, psychological well-being, medical outlook, and family and social relations. The Statistical Package for Social Sciences (SPSS) was used for data entry and analysis. The self-administered questionnaires were completed by 21 subjects. The majority of the respondents (52%) were very satisfied with the quality of their life. The quality of life of more than 50% of the subjects was good or excellent, based on the results of the Quality of Life Scale.

Key words: Quality of life, older people, Quality of Life Scale.

Resumen

Para examinar la percepción en relación a la calidad de vida de una muestra de personas de edad avanzada recibiendo servicios en una organización sin fines de lucro en Puerto Rico durante el año 2010, un Cuestionario de Calidad de Vida fue administrado a una muestra no probabilística de sujetos voluntarios. El cuestionario auto-administrado consistió de 50 preguntas cerradas con selección múltiple y escalas Likert. Una Escala de Calidad de Vida fue desarrollada y consistió de cinco sub-escalas: independencia, salud emocional, bienestar psicológico, bienestar médico y relaciones familiares y sociales. El Paquete Estadístico para las Ciencias Sociales (SPSS) fue usado para la entrada y análisis de los datos. El cuestionario auto-administrado fue completado por 21 sujetos. La mayoría de los participantes (52%) estaba muy satisfecha con la calidad de sus vidas. La calidad de vida de más del 50% de los sujetos era buena o excelente, basado en los resultados de la Escala de Calidad de Vida.

Palabras claves: Calidad de vida, personas de edad avanzada, Escala de Calidad de Vida.

INTRODUCTION

The aging of the population is associated with an increasing demand for services to seniors. This is occurring at a time of fiscal restraint when service providers are being encouraged to rationalize their activities. In order to provide services that are sensitive and responsive to the needs of older people served by non-profit organizations, it is necessary to develop a more accurate profile of this target population group at the institutional level. Furthermore, scarce resources and growing needs make it crucial to assess the needs to be addressed and determine priority areas for successful program planning and implementation.

To have a clear perspective, it is important to understand the concept quality of life. Quality of life is defined as the person's ability to enjoy normal life activities and is a term used to evaluate the general well-being of individuals and societies.^{1,2} Based on the literature, quality of life is a major concern for older people and many factors contribute to their perception of this concept.³ In the present study, the following quality of life factors were considered: sociodemographic information, independence/functional living, emotional health, living arrangements, psychological well-being, medical outlook, type of residence, and family and social relations.

The literature showed that older people considered crucial for their quality of life the importance of retaining their mobility and independence because it allowed them to avoid being dependent on others.^{4,5} Emotional health refers to the overall psychological well-being of an individual, including the way he/she feels about him/herself, the quality of their relationships, and the ability to manage their feelings and deal with difficulties.⁶ Thus, emotional health refers to the presence of positive characteristics that allow an individual to participate in life to the fullest extent possible through productive, meaningful activities and strong relationships. Researchers reported that people who were emotionally healthy were in control of their emotions and their behavior.⁶

In order to provide services that are sensitive and responsive to the needs of older people served by non-profit organizations, it is necessary to develop a more accurate profile of this target population group at the institutional level.

The results from a cross-national comparison of living arrangements of older people conducted by Velkoff showed that living arrangements were influenced by a variety of factors, including marital status, financial well-being, health status, and family size and structure, as well as, cultural traditions such as kinship patterns, the value placed on living independently or with family members, the availability of social services and social support, and the physical features of housing stock and local communities.⁷ The results also showed that women in developed countries were more likely than men to live alone as they age and that there was an increase in the proportion of older people that was living alone in developed countries.

On the other hand, the results of the study conducted by Lloyd-Sherlock showed that the living arrangements of older people were usually an important determinant of their quality of life.⁸ For older people, it is important to have a meaningful role within the family and society. Remaining an active member of society in older age is important and influences the quality of life.⁵ Social activities offer older people a useful role in society and contribute to a sense of structure and safety. Participation in family, community and social life increases their own feelings of fulfillment and respect. Gabriel and Bowling (2004) reported that keeping older people busy is vital for the maintenance of psychological well-being.⁴

Based on the literature, older people considered health as an important factor on their quality of life.⁹ The results of Bowling et al. (2007) showed that people perceived quality of life as a balance between body and mind; secondary gain and supportive relationships during illness; and effective coping strategies.⁹ Older people tend to spend more time in their homes as a result of having more leisure time or due to increasing frailty. The area in which older people resides, as well as, the local facilities contribute considerably to quality of life.⁴ In a previous study, researchers found that older people identified various concerns that impacted their quality of life and identified that affordable and appropriate housing was a crucial component in ensuring the health and well-being of older people.¹⁰

Remaining an active member of society in older age is important and influences the quality of life. Social activities offer older people a useful role in society and contribute to a sense of structure and safety.



The role of social support and social networks was identified as an important factor for the health and well-being of older people. The influence of the social environment such as family, friends, neighbors, service providers, etc. also contributes to determining the quality of life and well-being of older people.¹⁰

The results of another study showed that approximately 15% of people aged 50 and over did not live with a spouse or partner and met up with their children, family or friends less than three times a week. It was reported that frequent contact with people declined with age. Finally, according to the social support domain, which measures quality rather than frequency of social contacts, approximately 10% of people aged 50 and over did not have anyone (a partner, children, family or friends) strongly supporting them when in need.¹¹

It is important for older people to have personal contact with somebody on a daily basis. The literature suggests that good relationships with friends and family enable older people to feel valued and cared for, impacting positively their sense of well-being and contributing significantly to their quality of life.⁴ The results of Gabriel and Bowling (2004) demonstrated that older people were greatly influenced by interpersonal contact and interpersonal interaction, helping them sociologically.⁴

The purpose of this study was to examine the perception regarding the quality of life of a sample of older people receiving services at a non-profit organization in Puerto Rico during 2010 to use it as a starting point to design services better tailored to their needs. The objective of this study was to determine the quality of life of the sample, based on the Quality of Life Scale.

METHODOLOGY

The study was based on a non-experimental, descriptive and cross-sectional design.¹² The sample selected to complete the self-administered questionnaire was a non-probability sample of voluntary subjects. To collect the data, a self-administered questionnaire

was developed in English and Spanish. The questionnaire consisted of 50 closed-ended questions, including multiple choice and Likert scales. The questionnaire included simple instructions to facilitate its administration. Participation was voluntary and the information was anonymous and confidential.

The questions of the data collection instrument included major domains of quality of life: sociodemographic information, independence/functional living, emotional health, living arrangements, psychological well-being, medical outlook, type of residence, and family and social relations. A Quality of Life Scale was developed and it consisted of five sub-scales: independence/functional living, emotional health, psychological well-being, medical outlook, and family and social relations. The data collection instrument was pre-codified to facilitate data entry and data analysis. The Statistical Package for Social Sciences (SPSS) was used for data analysis.¹³

RESULTS

The self-administered questionnaire was completed by a non-probability sample of 21 voluntary subjects receiving services at a non-profit organization in Puerto Rico. The majority were female (90%) and 10% were male. More than 50% were volunteers and 38% were retired. The age fluctuated from 63 to 80 years old. Almost 50% of the respondents considered that they never needed help to take care of themselves while approximately 25% needed help most of the time. More than 50% stated that they never needed help to shop, visit family members or friends, or cook or prepare meals.

Regarding the level of satisfaction with their emotional health, more than 70% were very satisfied with their life, social life, and the things they do. On the other hand, 67% were very satisfied with their emotional health while 52% were very satisfied with the quality of their life. Respondents were asked about their living arrangements during the last four weeks. Many (57%) stated that they live alone and almost 25% live with a significant other or spouse.

Regarding the psychological well-being, more than one third reported to feel full of energy most of the time while more than 75% felt happy most of the time. More than 65% never felt lonely or sad. Concerning their medical outlook, more than 50% used prescribed medicines and took medicines most of the time.

Participants were asked about the type of residence they were living during the past four weeks. The majority (81%) lived in a house and 19% lived in an apartment. Lastly, respondents were questioned about the level of satisfaction with family and social relations. More than 80% of the respondents were very satisfied with the number of friends they have and the way they get along with family. Likewise, more than 70% of the respondents were very satisfied with the neighborhood, the way they spend their time, the activities in which they participate, the support they get from others and their family, and how useful they are to others.

The Quality of Life Scale was created, based on five sub-scales: independence/functional living, emotional health, psychological well-being, medical outlook, and family and social relations. The scale was analyzed and scored as 1=Deficient; 2=Poor; 3=Regular; 4=Good; and 5=Excellent. The results of the Quality of Life Scale showed that the quality of life of 24% of the subjects was deficient or poor (Table 1). The same percentage scored regular while 52% scored good or excellent. The majority of the elderly who indicated to be working as volunteers showed an excellent quality of life while the majority of the retirees showed a good quality of life, based on the scale (Table 2).

The majority of the elderly who indicated to be working as volunteers showed an excellent quality of life while the majority of the retirees showed a good quality of life, based on the scale.

Table 1. Distribution of Respondents' Quality of Life Scale

Scale	Frequency	Percent
1=Deficient	2	9.52
2=Poor	3	14.29
3=Regular	5	23.81
4=Good	7	33.33
5=Excellent	4	19.05
TOTAL	21	100

Table 2. Distribution of Respondents' Quality of Life Scale by Working Status

Scale	Working Status			TOTAL
	Retired	Volunteer	Other	
1=Deficient	2 (9.52%)			2 (9.52%)
2=Poor	1 (4.76%)	2 (9.52%)		3 (14.29%)
3=Regular	2 (9.52%)	3 (14.29%)		5 (23.81%)
4=Good	3 (14.29%)	3 (14.29%)	1 (4.76%)	7 (33.33%)
5=Excellent		4 (19.05%)		4 (19.05%)
TOTAL	8 (38.10%)	12 (57.14%)	1 (4.76%)	21 (100.00%)

CONCLUSIONS

Based on the results, the main conclusions of the study are that the majority of the respondents (52%) were very satisfied with the quality of their life; based on the results of the Quality of Life Scale, the quality of life of more than 50% of the subjects was good or excellent; and that only those working as volunteers showed an excellent quality of life.

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DESERTIFICATION: SOME OF ITS CAUSES AND SOME COPING EXPERIENCES

Prof. Aldo T. Marrocco

INTRODUCTION

The phenomenon of desertification consists in the alteration of the soils that often, depending on the way they have been used, become barren and unfit for growing crops. It is a phenomenon that happens, for instance, in Sahel, where it has frequently driven people to migrate. On the other hand, the advance of deserts is, unlike the Sahel example, a phenomenon that only occurs on the outskirts of deserts. Here, the wind-swept sand of the dunes encroaches on the neighboring areas, some of which may be inhabited or tilled. Every year, desertification makes millions of hectares of land unusable. This process steals green areas from the planet, probably contributing to climate change, which is, in turn, the concomitant cause of such phenomenon. Desertification may contribute to food shortages and price increases. The United Nations declared 2006 the year of deserts and desertification.

Since this is a very complex phenomenon, this paper is just an introduction to a more complete study. Through this paper, which can serve as a teaching unit, individuals and students can understand how vulnerable the agricultural ecosystems are, especially the tropical ones, and that nature offers the means to prevent and cope with desertification.

DISCUSSION

The salinization of farmland is a frequent cause of desertification. Salinization usually occurs when crops that need lots of water are cultivated in dry climates. The water that is obviously provided through irrigation largely evaporates, leaving its salt content in the soil. Subsequently, because the washing effect of rainwater is missing, over time such salts build up into excessive amounts. In this way, the soil becomes less and less

Every year, desertification makes millions of hectares of land unusable. This process steals green areas from the planet, probably contributing to climate change, which is, in turn, the concomitant cause of such phenomenon.

productive and eventually becomes barren. Water absorption by the roots is regulated by osmotic pressure.¹ Under normal circumstances, the water contained in the cellular fluids of the roots has a higher salt content than the water contained in the soil; so the latter is absorbed by the plant, which lives normally. If the water contained in the soil has a higher salt content, the water flow is reversed. The plant withers and may dry up. As soon as the conditions that caused such salinization cease to exist, the soils naturally regenerate. Actually, the simple exposure to a sufficient amount of mineral-free rainwater washes away all the salty build-ups. However, such rainwater must effectively seep through the soil and should not simply flow on the surface.

A soil can also be subject to salinization when the water table is very shallow. In this case, it is the evaporation of the groundwater rising to the surface through capillarity which leaves behind some mineral salt residues. Seawater too can be the cause of salinization in the farmland. This is what has happened, for instance, in Indonesia as a consequence of the 2004 tsunami. However, even without such special catastrophic events, this phenomenon is a frequent occurrence in coastal flatlands.² There can be seepage of seawater into the water table, boosted by the rise in the sea level and by water consumption, which remarkably quickly can lower the groundwater level. It has also been reported that sodium and chloride are toxic for plants and that the availability of trace elements is altered by the changes in pH that result from salinization. Irrigation systems that use up more water than required, as well as, wasting precious water resources, speed up salinization and, thus, can cause even worse damage.³

The need to improve the current state of affairs while increasing agricultural productivity for an ever-growing world population suggests that some changes are in order. For example, the use of more effective irrigation systems, an optimum use of rainwater, and productive choices that are sympathetic to the pedoclimatic environment are all recommended.

In China, in the basin between the TianShan Mountains and the Kunlun Mountains, salinization had been caused by a very shallow water table. Moreover, the dunes of the nearby Taklimakan desert were advancing. Farming and breeding

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Some techniques used to make the most of rainwater help the growing of crops even in harsh conditions.

were becoming more and more difficult. The “Tamarix Project” was implemented here to recover these soils so that production could be resumed.^{4,5} Basically, this simply involved the natural propagation of native trees, mostly of the genus Tamarix. These are very particular trees. They not only withstand very strong winds and sudden changes in temperature that are typical of the area, but they also tolerate water stagnation and salty soils. In addition, they can grow on dunes and can withstand sand floods. In the farmlands, rows of these trees, which use up any excess water contained in the soil, were planted and, thus, the water-table level was lowered, removing the cause of salinization. At the same time, in the breeding areas on the outskirts of the nearby desert, the ability of some trees of the genus Tamarix to grow on the dunes helped to prevent the dunes from advancing. These trees, which also provide timber and fodder, originally grew in these areas where they had maintained a well-balanced environment for many centuries. The planting of Tamarix trees in this way was able to repair the damage caused by the intensive deforestation of previous decades, which had been turning the area into a desert.

Climate change makes things worse for dry and moderately dry areas. In these areas, great differences in rainfall are found from one year to the next. In addition, great differences in rainfall can also be found in nearby areas. In Sahel, rains are concentrated in one season, the length of which depends on the latitude. Here, the soils are often slow in absorbing water. During the few but intensive rains, a minimal amount of water is absorbed while the rest flows across the surface and streams away. So, whilst there can be floods downstream, the upstream soils absorb water just a few millimeters deep and do not store up enough water to support the life of plants or crops.

Some techniques used to make the most of rainwater help the growing of crops even in harsh conditions.^{6,7} For example, on slopes, a classic technique consists in digging small furrows or erecting small banks, perpendicular to the most sloping line. These structures, arranged along the contour lines of the land, trap the water that flows down so that it has time to seep into the soil. Often, hedges are planted along these structures or all around the tilled land. This reduces the drying effect of the hot, dry winds.⁸ In addition to protecting biodiversity, such hedges can

also provide food, natural medicines, and timber.

There is a very peculiar technique that is typical of the traditional farming practices of Niger and Burkina Faso, which here is called zai.⁹ This allows those populations to grow millet and sorghum in degraded soils, making the soil fertile again in five years' time. Small holes are made in the ground, thirty centimeters in diameter, and evenly spaced out, 80-100 cm apart from each other. Some organic manure or straw is placed in the holes. These materials attract the termites, which feed on them and, starting from the hole, begin to dig nests and galleries, a few decimeters deep but very long. When the rainy season begins, seeds are planted in these holes so that cereals can grow in them. The rainwater that is not absorbed by the soil surface is swallowed up by the holes, filling up the underground cavities dug out by the termites. In this way, the subsoil stores up remarkable amounts of water which otherwise would stream away. The water, thus, protected from evaporation, is reached by the roots of the cereals which can be harvested. The termites leave in these underground cavities remarkable amounts of organic substances that are used by the cereals as fertilizers. The soil surface between the holes, which has absorbed only minimal amounts of water, will not host any unwanted weeds. This favorable interaction between the soil and the termites can also be observed in nature, in the savannah or in the tropical forest. The zai technique is also used to re-afforest soils.

For the sake of completeness, note that over 2,000 species of termites are known, and some of them are considered harmful for some crops, as well as, for wooden items. However, research conducted in some countries in Sahel testifies, at least in certain areas, to the effectiveness and benefits provided by techniques that rely on the activity of termites and support their use.¹⁰ Zai schools have been set up and run by farmers in Burkina Faso since 1992.¹¹ One of the goals of this project is to conduct experiments to adapt such techniques to local circumstances. Farmers who have learnt the techniques, in turn, can teach them to others.

Overgrazing is a major cause of desertification, especially in Australia and Africa. Problems begin when plants are bitten too often by animals. After each bite, the plant tends to re-grow, taking energy from the roots. But frequent biting

A soil deprived of its vegetal coverage is also more exposed to the wind and, therefore, to wind erosion. Water and wind erosion can remove all the fertile layer of the soil, in just a few decades.

prevents the plant reaching a photo-synthesizing surface large enough to replenish the energy taken from the roots in order to re-grow. So the plant becomes weaker and weaker, unable to grow a strong, deep root system. Therefore, it will not withstand such stressors as drought or fire and will eventually dry up.¹² As a consequence, the soil will be deprived of its vegetal coverage and will be directly exposed to violent collision with rainwater during heavy rainfalls. A fertile soil contains organic substances which, by binding to the mineral particles, give it certain porosity. The collision of rainwater with the soil, which is no longer cushioned by its vegetal coverage, breaks up such formations. The resulting fragments eventually block the pores. In addition, excessive stamping by the hooves of animals, especially on wet soil, tamps the soil, further reducing its porosity.¹³ As a consequence, the rate at which the rainwater seeps into the soil can become up to ten times lower.¹⁴ Thus, after intensive rain, most of the water tends to simply stream away. Only a small amount of water is stored up by the soil and this will heavily affect the growth of grass. The water tables are not properly replenished, and this is detrimental to the underground water resources. Moreover, as it streams away, the water sweeps away some fine particles of soil, which is what gives streams their turbid appearance after a heavy rain. A soil deprived of its vegetal coverage is also more exposed to the wind and, therefore, to wind erosion. Water and wind erosion can remove all the fertile layer of the soil, in just a few decades.

For pasture to be sustainable, animals must leave the pastureland before the grass is too short and return only when the grass has had time to grow back. This will maintain the plants' strength, biodiversity and an appropriate vegetal coverage on the soil. This is why some breeders split their pasture into several areas that they use on a rotation basis. Another useful method is to arrange the drinking troughs so as to reduce the tramping of animals when drinking.

In Sahel, desertification often starts precisely near the few wells, where the animals converge after covering long distances and where they sometimes wait for a long time for their turn to drink. It is also essential to prevent animals going to pasture when the soil is wet and to organize their feeding to help avoid this

problem. It is a well-known fact that kneading wet clay and letting it dry in the sun is a technique for making bricks. The same happens to a wet, trodden, sun-dried soil, producing similar but certainly undesirable results. Experience, professional skills and the knowledge of plant and animal biology are the key to an optimum, sustainable use of pastures.^{15,16} But, in some countries, the lack of resources, including financial resources, hinders the spreading and implementation of such techniques.

Fire too is a major cause of desertification. Fire speeds up the oxidation of the organic substances contained in the soil, the presence of which is important, not least for the soil's water retention. Forest fires, by overheating the soil, may also kill many of the little beings that live there, such as, for instance, bacteria, fungi, earthworms and termites.¹⁷ In addition, of course, the fires greatly reduce available food and shelter for the survivors. Sticky substances on the skin of earthworms, as well as, other organic substances produced by fungi and bacteria bind together the particles of soil, giving it a good porosity.¹⁸ The feces of earthworms are very stable compounds,¹⁹ in which mineral particles and organic substances are kept together by the intestinal mucus.²⁰ Some species of termites, as we have mentioned, dig holes and subterranean chambers connected by a dense network of galleries into the soil. The sections of such galleries range between 1 and 20 mm; it has been observed that their overall length can reach 7.5 Km/hectare. Many species of termites line such cavities with their feces. So, as a result of the life that takes place within a soil, the soil will behave well in terms of water infiltration and retention and will also be well aerated, soft and rich in organic substances. All this boosts its fertility. After a fire, what remains underneath the ashes is a lifeless soil, which is exposed to water and wind erosion, bound to degrade further. The water cycle is also strongly affected.

CONCLUSION

To protect soils from the drying effect of the wind and sun, keeping them wet for longer in order to boost the growth of grass or other crops, it is recommended to install windbreak barriers, often made

Organic farming tends to enrich the soil in organic substances, keeps irrigation and tilling to a minimum, and preserves biodiversity by planting hedges near the crops and avoiding use of chemical pesticides. All of this also helps prevent the soil from degrading.

of trees and shrubs.²¹ Several plans have been implemented. However, success was greater when such installations provided useful or remunerative products, involving the local populations. Obviously, care was taken not to introduce any species that might have any harmful effects whatsoever.

In Sahel, for instance, the *Acacia albida* is considered a very interesting tree.⁶ It is a leguminous tree that enriches the soil with nitrogen. During the rainy season, the leaves fall and grass or cereals can grow under the tree, benefiting from the moderate shadow provided by the bare foliage. In addition, because it has very long taproots, there is no water competition with the other plants that have much less deep roots. During the dry season, the tree has leaves and part of this foliage can be fed to the animals as grass runs out in the pastures. An interesting physical principle is applied in China to reduce wind speed. Rows of trees having different heights are planted; this gives the landscape some “roughness”, which opposes more friction to the prevalent winds running through such rows. In Kenya, with the involvement of the villagers, a reforestation project was implemented. Here, small plant nurseries have been set up in the schools. Students learn to reproduce and plant trees near their villages. The project also includes training in organic farming.²² Afforestation of the Negev desert is an experience that is being studied by the Weizmann Institute of Science.²³

Even farmland that is shattered by too much tilling is more prone to erosion. Organic farming tends to enrich the soil in organic substances, keeps irrigation and tilling to a minimum, and preserves biodiversity by planting hedges near the crops and avoiding use of chemical pesticides. All of this also helps prevent the soil from degrading.

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ORGANIC HORTICULTURE IN THE SECONDARY SCHOOL

Prof. Aldo T. Marrocco

Abstract

Twenty square meters within the school precincts and 40 hours could be enough for an experience of horticulture involving a 20 student's class. The activity is presented as an experience-discovery for both students and teachers. Creating a school garden is not only exclusive of very skilled people. After the first experience, theoretical and practical courses for teachers about horticulture have been organized by the schools. This encouraged more teachers to start this activity. Some techniques of organic farming have been used: natural fertilization, mulching, intercropping and natural pesticides. Sometimes shelters have been provided for favoring beneficial organisms like spiders and coccinellids which control excessive proliferation of pest insects. As the awareness-raising process is essential to this project, it is also important for the pupils to identify the vegetable garden as a place in which they like to spend their time.

Key words: Horticulture, organic, mulching, beneficial organisms.

INTRODUCTION

It all began in autumn, when a primary school teacher from Pisa (Central Italy), contacted a voluntary assistant to work together in the creation of a vegetable garden at her school with her pupils.

She wanted to put in practice organic farming techniques and she hoped she would, thus, find some expert to help her. In fact, she only found a partner who was enthusiastic about the idea of contributing to such project but his experience was equally limited. It is important for the reader not to think that creating a vegetable garden at a school is only exclusive of very skilled people. The activity began with an introductory classroom lecture during which the pupils received explanations about the plan. This involved the farming of approximately 20m² of land within the school precincts to produce vegetables without chemicals. They added that the work would have been supported by theoretical classroom lectures. However, the educational units basically

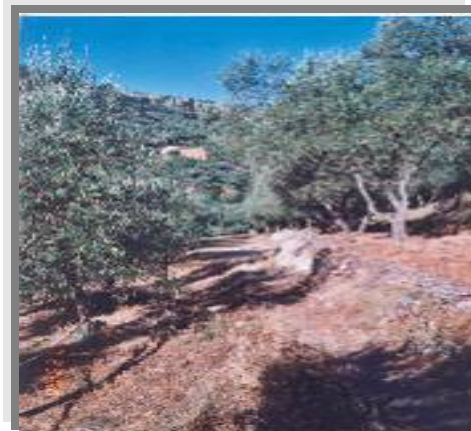


consisted of hands-on practice. The work was presented to the pupils as a potential experience-discovery for everyone, including the teacher and the assistant. The pupils were told that the guides were some books and some notes taken during a conversation with an organic farmer.

The plan included a one-day tour of an organic farm; the pupils were told about this later on, as soon as the work began to run. This is how the educational project began, in which the class spent about 40 hours during the year, including classroom lectures and the tour of the organic farm the following spring. The pupils seemed to be interested in the project, and the vegetable garden became their meeting point during the breaks. By the end of the year, the produce from the small vegetable garden was harvested and ‘tasted’ on several occasions.

The tour of the organic farm, located on the hills around Siena, was, for the pupils, an opportunity to see the same things they had made during the year, but on a larger, more professional scale. Later on, the schools organized theoretical and practical courses about horticulture for teachers (Figure 1). Then, more primary school and high school teachers decided to venture out on the same experience.

Figure 1. Valley of olive trees where first course for teachers was offered



DISCUSSION

The reasons the teachers had decided to carry out this work at school include, in particular: 1) Spreading of an activity which, as well as being productive, contributes to protect the environment; 2) The students start learning how to produce organic, healthful food. In addition, gardening can be regarded not just as a job but as a productive hobby; 3) The manual skills inherent to the educational unit involve the body and the mind of the pupils; and 4) The World Health Organization suggests using the school garden to develop awareness about food origins.

The size of a vegetable garden for a school is flexible. We can roughly state that, to grow 5-6 different types of vegetables, we need at least 1 m² per pupil, so that each pupil can personally experience the farming operations, including the planting of at least one specimen of a seed or seedling per type of vegetable. Thus, with an average classroom of 15-20 pupils, at least 20 m² of surface can be considered reasonably adequate. Some schools, which had land available, put to crop as much as 100 m² of surface per classroom. However, as to the land, we should add that sometimes there have been some snags at the beginning because of underground pebbles or stones. Also, the number of hours allocated to this educational unit must have been pretty high.

The ideal place would have been a south-facing area, which is exposed to sunlight all day. Proximity of the vegetable garden to the water will help make the job easier and simpler, so it is a bonus. As the awareness-raising process is essential to this project, it is also important for the pupils to identify the vegetable garden as a place in which they like to spend their time and for the vegetable garden to be located in a nice place.

Preparation of the soil is very important. A soil is ready for sowing when it has been broken up, fertilized, possibly mulched and the weeds have been extirpated. Sometimes the soils were loose; in this case, they were ready for digging over. These have been the luckiest cases; sometimes, the soils were much harder and had to be broken up with a pickaxe first. Then, after removing any pebbles, the soil was dug over along with the fertilizer.

A soil is ready for sowing when it has been broken up, fertilized, possibly mulched and the weeds have been extirpated.

A soil is more manageable when it is slightly wet rather than when it is dry; but a soil that is too wet cannot be either tilled or treaded over because, in this case, it would lose its properties. The soil can be broken up by somebody else, as it is certainly the most tiring operation, for instance, in some suburban school, the Municipality, at the teacher's request, promptly sent the equipment and the staff to till the ground. In other cities, the waiting times promised to be longer, so other solutions were sought. Sometimes, the problem was solved with the help of some parents.

In our experience, we used, in particular, four typical organic farming techniques: natural fertilization, mulching, favorable intercropping, and natural pesticides.

Fertilization

As everyone knows, the purpose of fertilization is to give the soil all those substances it needs to become fertile and produce a good crop. In chemical fertilization, the soil is mainly given the soluble mineral substances that are instantly absorbed by the plant roots. This causes a quick response in the plants, which feel the effect of a chemical fertilization more rapidly than that of natural fertilization.

Natural or organic fertilizers release their substances into the soil more slowly. Conversely, they are less prone to be washed away by rain and, therefore, they contribute less to the eutrophication of rivers and seas. In addition, they contain many substances which boost a well-balanced growth in plants which, fertilized, can have high vitamin content and good organoleptic qualities. In a school garden, the simplest solution may be to use a non-animal organic fertilizer, for instance, crushed lupine, at least 1 kg/m² is needed. It is evenly scattered over the soil, then, dug into it.

Sometimes, manure (from cows, sheep or horses) was used, scattered all over the soil in a layer of approximately 5 cm. The manure is then dug into the soil. Manure must be mature, that is, aged at least 5 to 6 months. Such manure is very good; it helps raise the organic content of the soil, improving its

crumbliness and water retention. It is not difficult to find, at some farm or from some shepherd, and it doesn't cost much either. A problem with this choice is transport; the requirement is 1 m³ per 20 m² of soil. Moreover, even if after 5 to 6 months of aging, the manure becomes nearly odorless, using such material within the school precincts might not be welcomed or appreciated by everyone. Some schools used stable manure. This product is sold in plastic bags and its transport is easy.

Organic fertilization takes place in autumn or anyway as soon as possible, because it takes at least a few weeks before its effect can be observed. In addition, natural fertilizers can be produced from the leftovers of the school canteen (if available): the so-called «compost». We never did that because, if you make a mistake in preparing it, it can smell and it could attract unwanted animals. However, the literature explains how to make it. If the right technique is available, however, it can be an interesting experience, not least to introduce the concept of recycling organic matter.

Mulching

It consists of a layer of straw, hay, dried leaves and/or any other fine organic material that is placed onto the soil to cover it. It can be up to 20 cm thick. Mulching (which should not be confused with plastic coating), arranged so as to cover all the soil between one plant and the next, prevents unwanted weeds growing by depriving them of light. In addition, the presence of the mulch helps keep the soil wet and soft, limiting evaporation and protecting it from sunrays. Because of this, the soil needs less irrigation than an uncovered soil. This may help the vegetables overcome, for instance, the holiday period, when a whole sunny week with no watering might cause trouble for some vegetables. The water saved by mulching can raise the pupils' awareness of the possibility and need to save such precious resource. Hoeing too reduces evaporation, if the soil is not mulched. Mulching protects the soil from winter frosts. The organic material the mulch is made of slowly decomposes, enriching the soil with organic material.

Through organic fertilization and mulching, the soil lives in conditions that are similar to those, for instance, of a chestnut wood, where the soil is always covered with leaves, which contribute to retaining its crumbliness, fertility, and high humus content.

A wet soil, protected from frost, rich in organic matter, etc. is ideal for the growth of earthworms in the surface layers. They improve the soil.

Speaking about earthworms and their usefulness can provide a starting point for reflection about the need to respect these animals.

Through organic fertilization and mulching, the soil lives in conditions that are similar to those, for instance, of a chestnut wood, where the soil is always covered with leaves, which contribute to retaining its crumbliness, fertility, and high humus content. In addition, the organic content increases the porosity of the soil and, therefore, its ability to let water in and retain it, unlike chemical fertilization. All this enables the plant to produce good crops. If space and time are enough, it would be interesting to conduct some tests. As example, the vegetable garden might be divided into two, one part covered in mulch, the other left uncovered; then, one could observe the differences that come up during the year. The temperature, humidity, crumbliness, the presence of micro-organisms, earthworms, etc. may differ. Even the chemical composition may change in the long run. To properly cover a vegetable garden of 20 m², at least 3-4 bales of straw or hay of approximately 30 kg each would be needed.

Intercropping

There are chemical, physical and biological relations between the plants, which are extremely important for a successful crop. For instance, if carrots are grown next to onions, they will defend each other from parasites. The smell of carrots will keep the onion flies away, while the smell of onions will keep the carrot flies away. This will reduce the frequency and extent of parasitical attacks without having to use any pesticide. This is a form of “favorable” intercropping.

There are also some examples of “unfavorable” intercropping, which are obviously best avoided. For instance, potatoes next to tomatoes are less resistant to potato blight; in addition, it has been observed that secretions from potato roots can inhibit the growth of tomatoes. Sometimes, the effects of

growing different plants next to each other depend on purely physical factors. For example, lettuce, which thrives in the shade, is successfully intercropped with maize.

In other cases, forms of successful intercropping are the growing of surface-rooted plants next to deep-rooted plants; actually by taking their nutrients from different layers of the soil, they will not compete with each other at least for water and nutritional salts. Intercropping can be studied in depth as interesting theoretical classroom work.

In our school gardens, we designed and created different forms of intercropping. In doing this, we kept in mind these rules, which can be found in any good book about organic farming. We must also keep in mind that the whole productive cycle (including harvesting) can be carried out within the school year. Some instructions we followed to make the most of our forms of intercropping, from sowing to harvesting, are given below.

«After breaking up, fertilizing and possibly mulching the soil, sow 6 rows of vegetables (one per variety). They are listed according to their arrangement, from north to south. The distance between such rows (parallel and oriented east-west) should be 40 to 50 cm.

In central Italy, climbing peas are sown from late February to early April. Four to five peas are sowed in small holes 35-40 cm apart. After slightly pressing 2-3 cm of soil on top of the seeds, water the soil. When they are 20 cm tall, put in some props (branches, bushes, canes or other). They are harvested 80-90 days after sowing. Water when they bloom if it is very hot and dry.

Broad beans are sown before the end of February, 2 seeds per hole, 35-40 cm apart. Water the beans, as for peas and harvest, from late April to June. Both broad beans and peas should be soaked in water for 24 hours before sowing. Radishes are sown with a waning moon from late February to late April; cut a furrow in the mulch, sow, then cover with half a centimeter of fine soil or humus and slightly press with a rake; water all the time to keep the soil wet until they sprout. Then, if it is hot, water once every 2 days. They are

In organic farming, there are many natural techniques and products that may help defend plants and fruits from the diseases. Even natural products should be selected attentively. It is important that they will not damage, for example, the so-called beneficial insects, such as ladybirds, because they may help defend the crops.

harvested 30-50 days after sowing. Salads are sown from late February to late March (3-4 seeds for hole, 20-25 cm apart). Cover with one centimeter of soil and press. Water the salads as for radishes. They are harvested when the head has completely formed, within 80-90 days.

Carrots are sown from late February to late April with a waning moon. Cut a furrow in the mulch, sow on the surface of the soil and cover with one centimeter of fine soil or humus, then, slightly press with a rake. Water regularly until they sprout (the soil must be kept wet), then only when it is dry (after May) once every 3-4 days, harvest 90-100 days from sowing. The little onion bulbs are sown with a waning moon 15/20 cm apart (make some small holes in the mulch and bury just below the collar). Water at the beginning, then only rarely; if in May it is very hot, then water once or twice a month. Harvest the spring onions from late April to late May».

Natural pesticides

In organic farming, there are many natural techniques and products that may help defend plants and fruits from the diseases. Even natural products should be selected attentively. It is important that they will not damage, for example, the so-called beneficial insects, such as ladybirds, because they may help defend the crops. With the pupils, we used two very simple techniques. One consists in sprinkling some wood ash around the lettuce seedlings to prevent snails attacking them, as they might eat up their leaves in a very short time. Snails actually have problems crossing a soil if it is covered with ash. If it rains, the ash must be added again because when wet it loses effectiveness. However, this operation also provides the soil with precious nutrients. It is known that ash is also a good natural fertilizer.

Another product which protects the plants is macerated nettle, which is slightly effective for aphids' control. Just take one kg of fresh nettle (wearing gloves), chop it up with some strong scissors or a knife, and steep it in 10 liters of water in a bucket. After 24 hours, if it is hot, or 48 hours, if it is still cold, spray this fluid onto the plants infested with the aphids. Repeat as needed. This

product is not particularly effective in removing aphids but, if the treatment is started at the first stages of the infestation, it can provide good results. Aphids can easily infest the soft tops of broad beans in spring; plant left to them can be seriously damaged. In this crop, there is another interesting form of prevention, i.e. sowing broad beans in autumn instead of spring. In this way, if, for instance, the infestation happens around April, the infested tops can be taken off and save the plants, which will be tall enough by then. In this way, the steeped nettle will not be needed, even if it can still be used on other plants, such as artichokes.

Shelters may be provided for beneficial organisms. For example, a cardboard stripe tied around the trunk of an apple tree provides shelter to coccinellids, spiders and other carnivorous arthropods. These organisms (predators) are important for the bio-control of pest insects. Some cardboard stripes, as shown in Figure 2, can be left on the ground. Snails and slugs like to shelter therein. Since these animals are harmful to the seedlings, cardboards left on the ground are regularly emptied out of the garden, in order to remove these animals.

Figure 2. Cardboards where snails and slugs shelter



If a vegetable garden must be located in an area of the school which is not well exposed to sunlight, it can be interesting to recall that lettuce is a plant which thrives in the shade. Instead of sowing it, one can buy the seedlings

from a plant nursery. The soil must be kept wet for 1-2 weeks; then, the plants can be watered less frequently or even not watered at all in winter. The seedlings must be well tended, one should make sure they are straight and defend them from snails if needed. They will easily produce an abundant crop, which will attract everyone's interest. Turnips too can grow in the shade.

Going back to look at the educational unit in educational terms, we should add that this unit produced some extremely positive repercussions when it was proposed to particularly difficult or disabled young people. These young people often turned out to work serenely and profitably within the vegetable garden.

Regarding the costs, supposing we use 20 m² of soil, the estimated cost might be 20 € for the fertilizer (crushed lupine), 20 € for seeds and seedlings. If we decide to buy 4 bales of straw for the mulching, we might roughly spend another 30 €. Farm tools cost 12 to 22 € each, including handles. Supposing we buy 2 spades, 2 hoes, one rake, we would spend about another 80 €. So, the total cost might amount to approximately 150 €. Sometimes the students helped reduce such costs, sometimes even considerably, by bringing in materials and tools given to them by their families.

Concerning the organization of field work with the students, when the students work in the vegetable garden, they should be divided into groups of 3-4 students each, working in a rota; this will help follow them and correct them as needed, as well as, prevent them colliding with or being in the way of each other. The others can look on or, if more teachers are available, they can keep working in the classroom. The students were always advised to bring a pair of spare shoes, to be used only outdoors, not to soil the floors as they came back in.

Approximately, a vegetable garden of 20 m², where 5-6 varieties of vegetables are grown, will take about 30 hours during the school year. But this educational unit lends itself to a flexible approach, requiring less work and fewer resources, which might be increased in the following years once the first difficulties have been smoothed out. Whenever possible, these experiences

...we should add that this unit produced some extremely positive repercussions when it was proposed to particularly difficult or disabled young people. These young people often turned out to work serenely and profitably within the vegetable garden.

were completed by a tour of an organic farm. Sometimes, in the farms, the students experienced: bread making, medicinal herbs, environmental protection, natural foods and others. This diversified and enriched the educational content of the project. Sometimes such tours lasted even 3-4 days.

A simple and cheap experiment in the classroom shows how important is the organic matter in the soil: 200 g of soil are placed in a dish and 200 g of compost are placed in another dish. The students observed that when the same amount of water, e. g. 80 g, is poured into each dish, the soil soaks up only a small part of the water, while the compost soaks it all up. The students can see to what extent the compost and, therefore, the organic matter can improve soil's ability to soak up and store water. Notoriously, forest soils, which are rich in organic matter, have a positive effect on the water cycle, since they absorb a lot of rainy water and limit runoff. Organically cultivated fields, differently from others, may behave nearly as favorably as forest soils.

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LA AUTONOMÍA UNIVERSITARIA Y LA INTERPRETACIÓN JURISPRUDENCIAL MEXICANA

Dr. Manuel Jiménez López

INTRODUCCIÓN



El tema de la Autonomía Universitaria como derecho fundamental, público, subjetivo, por virtud del cual las Instituciones Mexicanas de Educación Superior Autónomas por Ley, demandan frente al poder político del Estado y otros sujetos de derecho, el respeto a su facultad y responsabilidad de gobernarse a sí mismas para realizar sus fines, implica necesariamente el análisis de la esencia de la misión de las universidades públicas autónomas, como generadoras, reproductoras y proyectadoras del conocimiento socialmente útil con base en los procesos de investigación, enseñanza y divulgación de la cultura. En el presente trabajo de investigación, nos esforzamos por dejar de lado, dada la extensión requerida en la convocatoria, los aspectos ideológicos, para concentrarnos, principalmente, en el terreno del derecho, tocando tangencialmente y para la comprensión de las figuras jurídicas analizadas, algunos aspectos sociales que las perfilaron. Estimamos que, para fijar y clarificar los alcances de la autonomía universitaria desde la perspectiva del Derecho Objetivo, resulta indispensable exponer las definiciones de los conceptos a analizar y algunos criterios doctrinales, incluido el del suscrito.

Nuestro trabajo de investigación lo hemos dividido, después de la presente introducción, en tres capítulos, el primero de los cuales lo denominamos: *Antecedentes Legislativos de la Autonomía Universitaria Mexicana*, en el cual hacemos mención de los principales ordenamientos jurídicos que esbozan o contienen aspectos autonómicos universitarios, concluyendo con la fracción VII del artículo tercero constitucional, que contempla la plena autonomía de las Instituciones de Educación Superior

Autónomas por Ley, en México; el segundo capítulo lo hemos titulado: ***Marco Jurídico de las Universidades Públicas Autónomas Mexicanas***, en el que nos referimos en forma lo más sumaria posible, a los fundamentos constitucionales y legales y algunos de los criterios doctrinales que han perfilado la autonomía universitaria y en donde formulamos una postura fundamentada en los ordenamientos que regulan la vida de dicha figura jurídica; el tercer capítulo lo hemos denominado: ***La Interpretación Jurisprudencial Mexicana y la Autonomía Universitaria***, en un estudio correlacionado con la segunda fuente formal del derecho: La Jurisprudencia, de la cual analizamos algunos de los criterios de los órganos jurisdiccionales definidores de la misma y que en nuestro país son, tanto el Pleno, como las Salas y los Tribunales Colegiados de Circuito, de la Suprema Corte de Justicia de la Nación; finalizamos nuestra investigación con tres conclusiones obtenidas del cuerpo del presente trabajo, que vienen a sintetizarlo.

ANTECEDENTES LEGISLATIVOS DE LA AUTONOMÍA UNIVERSITARIA MEXICANA

Estimamos que el concepto jurídico de autonomía universitaria mexicana es producto de la experiencia histórica que parte de las ideas innovadoras de don Justo Sierra Méndez, quien desde el año de 1881, luchó por crear una universidad nacional autónoma, y que ve cristalizadas parcialmente sus ideas, el 26 de mayo de 1910, fecha de la expedición de la ley constitutiva de la Universidad Nacional de México, época en la que el maestro Justo Sierra se desempeñaba como ministro de Instrucción Pública y Bellas Artes. En dicha ley se consigue la libertad académica y la personalidad jurídica de la UNAM, a la que se considera como un órgano del Estado, dependiente del Secretario de Instrucción Pública y Bellas Artes, siendo facultad exclusiva del Presidente de la República, la de nombrar directamente a su Rector, quien a su vez debía rendir informes anuales a dicha dependencia; tal ley establecía en sus artículos primero, tercero y cuarto lo siguiente:

“Artículo 1°. Se instituye, con el nombre de Universidad Nacional de México, un cuerpo docente cuyo objeto primordial será realizar en sus elementos superiores la obra de la educación nacional.

...

Artículo 3°. El Ministro de Instrucción Pública y Bellas Artes será el jefe de la Universidad; el gobierno de ésta quedará, además, a cargo de un Rector y un Consejo Universitario.

Artículo 4°. El Rector de la Universidad será nombrado por el Presidente de la República; durará en su cargo tres años; pero podrá renovarse su nombramiento para uno o varios trienios...”

También, es de mencionar el decreto número 2 del 5 de octubre de 1917, que le reconoció a la Universidad Michoacana de San Nicolás de Hidalgo, de nuestro país, algunos aspectos autonómicos y que posteriormente fue exhibido como precedente jurídico para inducir la aprobación de la autonomía universitaria en el año de 1929. Otra normatividad que contempla elementos de autonomía universitaria lo es el decreto número 106, expedido en el año de 1923 por la legislatura local de San Luis Potosí, en relación a la Universidad Autónoma de esa Entidad Federativa. La primera ley que concedió expresamente autonomía a la UNAM, fue la promulgada el 22 de julio de 1929; dicha autonomía fue parcial pues la seguía vinculando jerárquicamente con el Estado, ya que la integración del Consejo Universitario, requería de un delegado de la Secretaría de Educación Pública (artículo 8o.); su rector era designado por el consejo de una terna propuesta por el Presidente de la República (artículos 12, inciso d) y 14); y subsistía la obligación de la universidad de rendir un informe a dicho Presidente (artículo 32). Posteriormente, en el año 1933, se expide una nueva ley orgánica universitaria, por conducto de la cual se otorga plena autonomía a la UNAM, a pesar de solamente contener nueve artículos de texto principal, más tres transitorios, aprobada el 19 de octubre de 1933, pero estuvo en vigor solamente por once años, pues fue sustituida por la que actualmente la regula.

Como beneficiarias de dicha autonomía, a las instituciones de educación superior autónomas por ley se les concede, en la norma máxima del país, expresamente, facultades de autogobierno y normativas que abarcan los ámbitos académicos y administrativos.

El 6 de enero del año 1945 es publicada en el diario oficial de la federación la ley orgánica de la UNAM, actualmente en vigor, de 18 artículos de texto principal, más ocho transitorios, ordenamiento jurídico en el que se establece expresamente, en su artículo 2o., fracción I, que la Universidad Nacional Autónoma de México tiene derecho para organizarse como lo estime mejor, dentro de los lineamientos generales señalados en su ley orgánica, y reconociendo en su artículo primero la calidad de organismo público descentralizado; dicho numeral textualmente expresa:

“Artículo 1º.- La Universidad Nacional Autónoma de México es una corporación pública - **organismo descentralizado del Estado** - dotada de plena capacidad jurídica y que tiene por fines impartir educación superior para formar profesionistas, investigadores, profesores universitarios y técnicos útiles a la sociedad; organizar y realizar investigaciones, principalmente acerca de las condiciones y problemas nacionales, y extender con la mayor amplitud posible los beneficios de la cultura.”

En el año de 1980, se modifica el artículo tercero de la Constitución Política de los Estados Unidos Mexicanos, relativo a la educación y en la fracción VII (antes VIII) de dicho numeral constitucional se eleva a garantía constitucional la autonomía universitaria. Como beneficiarias de dicha autonomía, a las instituciones de educación superior autónomas por ley se les concede, en la norma máxima del país, expresamente, facultades de autogobierno y normativas que abarcan los ámbitos académicos y administrativos. Tal disposición constitucional expresa textualmente:

“Artículo 3º.- Todo individuo tiene derecho a recibir educación...

...

VII. Las universidades y las demás instituciones de educación superior a las que la ley otorgue autonomía, tendrán la facultad y la responsabilidad de gobernarse a sí mismas; realizarán sus fines de educar, investigar y difundir la cultura de acuerdo con los principios de este artículo, respetando la libertad de cátedra e investigación y de libre examen y discusión de las ideas; determinarán sus planes y programas; fijarán los términos de ingreso,

Las relaciones laborales, tanto del personal académico como del administrativo, se normarán por el apartado A del artículo 123 de esta Constitución, en los términos y con las modalidades que establezca la Ley Federal del Trabajo conforme a las características propias de un trabajo especial, de manera que concuerden con la autonomía, la libertad de cátedra e investigación y los fines de las instituciones a que esta fracción se refiere;...

promoción y permanencia de su personal académico; y administrarán su patrimonio. Las relaciones laborales, tanto del personal académico como del administrativo, se normarán por el apartado A del artículo 123 de esta Constitución, en los términos y con las modalidades que establezca la Ley Federal del Trabajo conforme a las características propias de un trabajo especial, de manera que concuerden con la autonomía, la libertad de cátedra e investigación y los fines de las instituciones a que esta fracción se refiere;...”

La organización de la administración pública en México tiene como sustento jurídico principal lo dispuesto por el artículo 90 de la Constitución Política de los Estados Unidos Mexicanos, que al efecto dispone:

“Artículo 90.- La Administración Pública Federal será centralizada y paraestatal conforme a la Ley Orgánica que expida el Congreso, que distribuirá los negocios del orden administrativo de la Federación que estarán a cargo de las Secretarías de Estado y definirá las bases generales de creación de las entidades paraestatales y la intervención del Ejecutivo Federal en su operación. Las leyes determinarán las relaciones entre las entidades paraestatales y el Ejecutivo Federal, o entre éstas y las Secretarías de Estado.”

La Ley Orgánica de la Administración Pública Federal mexicana establece en sus artículos 1o., 2o., 3o. y 45, las bases de organización de la administración pública federal, centralizada y paraestatal como auxiliar de aquella, esta última, a su vez, se divide en descentralizada, y desconcentrada.

“Artículo 3o. El Poder Ejecutivo de la Unión se auxiliará, en los términos de las disposiciones legales correspondientes, de las siguientes entidades de la Administración Pública Paraestatal:

I. Organismos descentralizados: ...

Artículo 45. Son organismos descentralizados las entidades creadas por ley o decreto del Congreso de la Unión o por decreto del Ejecutivo Federal, con personalidad jurídica y patrimonio propios, cualquiera que sea la estructura legal que adopten.”

MARCO JURÍDICO DE LAS UNIVERSIDADES PÚBLICAS AUTÓNOMAS MEXICANAS

Para analizar el marco jurídico de las universidades públicas autónomas, es necesario indicar nuestro concepto del derecho, como objeto de la ciencia jurídica, y perfilar la característica principal del creador, aplicador e intérprete del mismo. Entendemos por derecho, al conjunto de normas, principios e instituciones que regulan la conducta externa del hombre en sociedad, normas y principios creadas o reconocidas y aplicados por el Estado, en busca de la paz y el bien común. Las fuentes del derecho objetivo, la doctrina las divide en: 1) Fuentes Reales, consistentes en los hechos sociales que el creador de la norma toma en cuenta para la formación del derecho; 2) Fuentes Formales que son los procedimientos de creación de las normas jurídicas y que contempla tres especies; a) La Ley o el procedimiento legislativo, b) La Jurisprudencia, y c) La Costumbre; y, por último, 3) Fuentes Históricas que son los documentos jurídicos que el tiempo va dejando.

El Estado de Derecho democrático y moderno se caracteriza porque los órganos que lo integran desempeñan funciones específicas y distintas a los demás, siendo tres las principales funciones públicas del Estado: a) la Legislativa a cuyo ejercicio crea las normas jurídicas; b) la Función Administrativa por la cual el Estado provee al cumplimiento de tales normas; y c) la Función Jurisdiccional, por medio de la cual el Estado aplicando e interpretando la norma, a través del proceso, resuelve la conflictiva social.

El derecho, objeto de la ciencia jurídica, se divide para su estudio y adecuada caracterización y determinación de su naturaleza en: a) Derecho Público, cuyas normas y principios regulan relaciones jurídicas de supra a subordinación, relaciones en las que órganos del Estado realizan frente al particular sus actos de autoridad caracterizados por la unilateralidad, la imperatividad y la coercitividad; b) Derecho Privado, que disciplina las relaciones jurídicas de coordinación, promovidas entre particulares; y c)

Derecho Social, que regula las relaciones entre económicamente diferentes para otorgar cobertura a la parte más débil, nivelando así su desigualdad.

Dichos sectores contemplan diversas ramas, dando origen a las disciplinas especializadas del derecho, las que fácilmente se determinan al ubicar en primer orden el sector de menos ramas, como es el Derecho Privado, con dos: a) Derecho Civil y b) Derecho Mercantil; por su parte el Derecho Social objetivamente considerado, en nuestro país, cuenta con tres principales ramas que son: a) el Derecho Laboral, b) el Derecho Agrario y c) el Derecho de la Seguridad Social. Las restantes ramas o disciplinas jurídicas especializadas forman parte del Derecho Público, encontrando la autonomía universitaria su fundamento jurídico y los elementos de su aplicabilidad en los ámbitos principalmente del Derecho Constitucional y el Derecho Administrativo. En efecto, es en la fracción VII del artículo tercero de la Constitución Política de los Estados Unidos Mexicanos, mencionado anteriormente, donde encontramos certidumbre de que el origen de la autonomía universitaria en nuestro país se encuentra en la ley, es decir, en un acto formal y materialmente legislativo, de carácter unilateral, impersonal, abstracto y general, que les confiere a las Instituciones de Educación Superior las atribuciones necesarias para gobernarse por sí mismas, ya sea que provenga del Congreso de la Unión o de las legislaturas locales; en tales leyes se determina el nacimiento de su personalidad jurídica y define el alcance y los límites de las universidades autónomas en nuestro país.

Las universidades públicas autónomas en México son organismos públicos descentralizados, federales o locales, según la ley que los origina, con personalidad jurídica, patrimonio propio, libertad orgánica y técnica para el desempeño del servicio público de educación superior en nuestro país. La autonomía y la capacidad de decisión que se confiere a las universidades públicas en México se encuentra subordinada a las normas y principios constitucionales que rigen la actuación de cualquier órgano del Estado.

LA INTERPRETACIÓN JURISPRUDENCIAL MEXICANA Y LA AUTONOMÍA UNIVERSITARIA

Respecto a la función pública de hacer o impartir justicia de los órganos jurisdiccionales en México, principales interpretadores de la norma jurídica, el Doctor Manuel

Gómez Oropeza expresa que:

“En nuestro país heredamos un sistema constituido por jueces cuya función se ejercía por delegación de la autoridad del rey, por lo que la justicia estuvo relegada a una subfunción de la administración, e incluso se les tenía a cargo de funciones de defensa de las prerrogativas reales...en contra de las usurpaciones de los nobles o demás autoridades menores...”¹

Por su parte, el diccionario Larousse de la lengua española atribuye tres principales significados a la voz Jurisprudencia: Ciencia del derecho; conjunto de las sentencias de los tribunales; norma de juicio que suple omisiones de la ley y que se funda en las prácticas seguidas en casos análogos.²

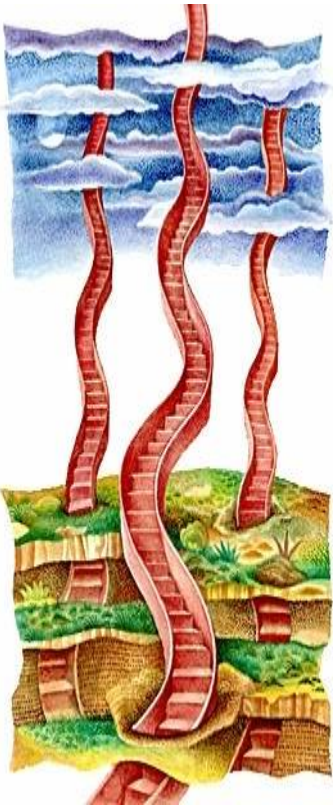
Como podemos notar, la Jurisprudencia es un término al que se le atribuyen diversos significados, pero en nuestro trabajo lo emplearemos en su segundo y tercer aspecto pues estimamos que la Jurisprudencia son los criterios de interpretación contenidos en ciertas resoluciones de determinados órganos jurisdiccionales federales que se derivan de la interpretación constitucional y legal que realizan, con el propósito de fijar, con carácter obligatorio, el correcto contenido y alcance de las normas jurídicas, así como, de colmar las lagunas que pudiera presentar la ley.

El ministro de la Suprema Corte de Justicia de la Nación, Licenciado Genaro Góngora Pimentel, considera a la jurisprudencia como:

“... una fuente material de derecho en México, tanto por llenar las particularidades técnicas que caracterizan a dichas fuentes, como por contar

¹ Gómez Oropeza, Manuel, LA JURISPRUDENCIA: SU CONOCIMIENTO Y FORMA DE REPORTARLA, Editorial de la Suprema Corte de Justicia de la Nación, México, 2005, p. 10.

² Cfr. Voz Jurisprudencia en Diccionario Larousse Esencial de la Lengua Española, Larousse, México, 1994, p. 383.



con los atributos de generalidad, impersonalidad, abstracción y obligatoriedad, en su aspecto de interpretación de la Ley...”³

Derivado de los antecedentes doctrinales y jurisprudenciales emitidos a partir de la Quinta Época por la Suprema Corte de Justicia de la Nación, se plantea el siguiente concepto de jurisprudencia:

“Es una fuente de derecho derivada de la interpretación constitucional y legal que, con fuerza obligatoria, crean determinados órganos jurisdiccionales al resolver los asuntos sometidos a su jurisdicción, con el propósito de fijar el correcto sentido y alcance de las normas jurídicas y adecuar su contenido a la dinámica de la vida en sociedad, a fin de mantener la seguridad jurídica en las esferas pública y privada.”⁴

El Doctor Miguel Carbonell, clarificando que existen tribunales distintos de los del Poder Judicial Federal mexicano que también emiten jurisprudencia, propone la siguiente definición:

“La jurisprudencia en el sistema jurídico mexicano es la norma general y abstracta, emitida en principio por los órganos del Poder Judicial Federal competentes, generalmente en sus resoluciones de carácter jurisdiccional, con la finalidad de interpretar e integrar el ordenamiento jurídico, que reuniendo ciertos requisitos y condiciones se vuelve obligatoria para los demás casos o situaciones semejantes que se presenten ante los órganos jurisdiccionales de menor jerarquía a aquellos que la emiten.”⁵

A. Procedimientos de Creación de la Jurisprudencia

1. Jurisprudencia por Reiteración

Para la formación de la jurisprudencia por reiteración, la ley de Amparo vigente, en sus artículos 192 y 193, establece que las resoluciones del Pleno de la Suprema Corte de Justicia constituirán jurisprudencia cuando lo resuelto en

³ Góngora Pimentel, Genaro, INTRODUCCIÓN AL ESTUDIO DEL JUICIO DE AMPARO, Editorial Porrúa S. A., Séptima Edición, México, 1999, p. 611.

⁴ SCJN, LA JURISPRUDENCIA Y SU INTEGRACIÓN, Editorial de la Suprema Corte de Justicia de la Nación, Segunda Edición, México, 2005, p. 20.

⁵ CARBONEL Y SÁNCHEZ, Miguel, BOLETÍN MEXICANO DE DERECHO COMPARADO, NÚMERO 87, Sección de Artículos, 1996, www.juridicas.unam.mx.

ellas se sustente en cinco sentencias no interrumpidas por otra en contrario y se aprueben, por lo menos, por ocho Ministros. Por lo que respecta a las Salas, sus resoluciones constituirán jurisprudencia al ser aprobadas por cuando menos cuatro Ministros, y lo resuelto en ellas se sustente en cinco sentencias no interrumpidas por otra en contrario. Las resoluciones de los Tribunales Colegiados de Circuito constituirán jurisprudencia, siempre y cuando lo resuelto en ellas se sustente en cinco sentencias no interrumpidas por otra en contrario y se aprueben por unanimidad de los Magistrados que los integran.

2. Jurisprudencia por Unificación de Criterios

De acuerdo con el artículo 107, fracción XIII, constitucional, se fija jurisprudencia cuando el Pleno o las Salas de la Suprema Corte de Justicia resuelven la contradicción de criterios, lo que también se conoce como jurisprudencia por unificación, o por contradicción.

A diferencia de la jurisprudencia por reiteración, este tipo de jurisprudencia por contradicción no requiere de un número reiterado de sentencias, pues una sola resolución decidirá entre dos o más criterios contradictorios, cuál es el que prevalecerá, y esa resolución fijará jurisprudencia. Para la formación de la jurisprudencia por contradicción que resuelve la Suprema Corte de Justicia, funcionando en Pleno o en Salas, es necesaria la existencia de una contradicción de criterios, la denuncia ante la propia Suprema Corte de Justicia por parte de los sujetos facultados para ello por las leyes especiales y la intervención del procurador general de la República.

Los artículos 196, 197 y 197-A de la Ley de Amparo mexicana establecen que cuando las Salas de la Corte o los Tribunales Colegiados sustenten tesis contradictorias, cualquiera de las Salas o los Ministros que las integran, los mencionados tribunales o los Magistrados que los integren, el procurador general de la República o las partes que intervinieron en los juicios en que tales tesis hubieran sido sustentadas, podrán denunciar dicha contradicción y Pleno o en su caso alguna de las Salas de la SCJN, según

corresponda, decidirán cuál es la tesis que debe prevalecer. Una vez denunciada la contradicción de tesis, el procurador general de la República tendrá un plazo de treinta días para exponer su parecer, por sí o por conducto del agente que para tales efectos designe. La Suprema Corte de Justicia deberá emitir su resolución dentro del término de tres meses y ordenar su publicación. La ley no fija número de votos para aprobar la resolución, por lo que debe estarse a los necesarios para la aprobación de cualquier ejecutoria. La resolución emitida no afectará las situaciones jurídicas concretas derivadas de los juicios en los cuales se hubiesen dictado las sentencias contradictorias.

3. Jurisprudencia en materia de Controversias Constitucionales y Acciones de Inconstitucionalidad

También conocida como *jurisprudencia por razón fundada*, criterio obligatorio que se genera al resolver conflictos en materia de controversias constitucionales y acciones de inconstitucionalidad, de conformidad con la Ley Reglamentaria de las fracciones I y II del artículo 105 de la Constitución Política de los Estados Unidos Mexicanos, derivado de las razones que se contengan en los considerandos que funden los resolutivos de las sentencias aprobadas por cuando menos ocho votos; tienen carácter jurisprudencial pues constituyen asuntos de suma importancia donde el criterio que se emite, aunque sea en una sola ocasión, adquiere el carácter de norma jurisprudencial sin necesidad de ser ratificado por otros o como resultado de criterios contradictorios. El artículo 43 de la Ley Reglamentaria en mención textualmente dispone:

“ARTÍCULO 43. Las razones contenidas en los considerandos que funden los resolutivos de las sentencias aprobadas por cuando menos ocho votos, serán obligatorias para las Salas, tribunales unitarios y colegiados de circuito, juzgados de distrito, tribunales militares, agrarios y judiciales del orden común de los Estados y del Distrito Federal, y administrativos y del trabajo, sean éstos federales o locales.”

Tanto el Pleno como sus Salas y dos Tribunales Colegiados de Circuito en materia administrativa, de la Suprema Corte de Justicia de la Nación han realizado interpretación jurisprudencial en materia de autonomía universitaria. Por ejemplo, en jurisprudencia por contradicción de tesis, la Segunda Sala de la SCJN definió el órgano jurisdiccional competente para dirimir los conflictos entre las universidades autónomas y sus trabajadores, académicos y administrativos. Asimismo, en jurisprudencia por razón fundada en resolución de controversia constitucional, el Pleno de la SCJN determinó que la autonomía universitaria sólo puede establecerse mediante un acto formal y materialmente legislativo. Pero existe otro criterio de interpretación jurídica derivado de Contradicción de tesis, al que le correspondió el número 12/2000, mediante el que el más alto Tribunal Jurisdiccional del país precisa el origen y alcance de las atribuciones de autogobierno conferidas a las universidades públicas. Derivada de dicha ejecutoria, la H. Segunda Sala, SCJN, formula la Tesis de jurisprudencia 2a./J 12/2002, mediante la cual expresa que un gobernado que cumple con los requisitos que le permiten adquirir la categoría de miembro de la universidad, por ajustarse a las disposiciones legislativas y administrativas, que en ejercicio de su autonomía se dio la misma, el cual incorpora en su esfera jurídica un conjunto específico de derechos y obligaciones, y que al lesionarse los primeros constituye un acto de autoridad impugnabile a través del juicio de amparo, proceso jurisdiccional que en México sólo procede contra actos de autoridades, nunca en contra de actos de particulares, que afecten a otros particulares. Dicha tesis se identifica con los siguientes datos y textualmente expresa:

“Registro: 187358, Novena Época, Instancia: Segunda Sala, Jurisprudencia, Fuente: Semanario Judicial de la Federación y su Gaceta, XV, Marzo de 2002

Materia(s): Administrativa, Tesis: 2a./J. 12/2002, página: 320

UNIVERSIDADES PÚBLICAS AUTÓNOMAS. LA DETERMINACIÓN
MEDIANTE LA CUAL DESINCORPORAN DE LA ESFERA JURÍDICA

Las universidades públicas autónomas son organismos descentralizados... gozan de independencia para determinar por sí solas, supeditadas a los principios constitucionales que rigen la actuación de cualquier órgano del Estado, los términos y condiciones en que desarrollarán los servicios educativos que presten, los requisitos de ingreso, promoción y permanencia de su personal académico y la forma en que administrarán su patrimonio, destacando que en la ley en la que se les otorga la referida autonomía, con el fin de que puedan ejercerla plenamente, se les habilita para emitir disposiciones administrativas de observancia general.

DE UN GOBERNADO LOS DERECHOS QUE LE ASISTÍAN AL UBICARSE EN LA SITUACIÓN JURÍDICA DE ALUMNO, CONSTITUYE UN ACTO DE AUTORIDAD IMPUGNABLE A TRAVÉS DEL JUICIO DE AMPARO. Las universidades públicas autónomas son organismos descentralizados que forman parte de la administración pública y, por ende, integran la entidad política a la que pertenecen, esto es, la Federación o la correspondiente entidad federativa; además, se encuentran dotadas legalmente de autonomía, en términos del artículo 3o., fracción VIII, de la Constitución Política de los Estados Unidos Mexicanos, por lo que gozan de independencia para determinar por sí solas, supeditadas a los principios constitucionales que rigen la actuación de cualquier órgano del Estado, los términos y condiciones en que desarrollarán los servicios educativos que presten, los requisitos de ingreso, promoción y permanencia de su personal académico y la forma en que administrarán su patrimonio, destacando que en la ley en la que se les otorga la referida autonomía, con el fin de que puedan ejercerla plenamente, se les habilita para emitir disposiciones administrativas de observancia general. En ese tenor, una vez que un gobernado cumple con los requisitos que le permiten adquirir la categoría de alumno previstos en las respectivas disposiciones legislativas y administrativas, incorpora en su esfera jurídica un conjunto específico de derechos y obligaciones, por lo que la determinación mediante la cual una universidad pública autónoma lo expulsa, o por tiempo indefinido le impide continuar disfrutando de dicha situación jurídica, constituye un acto de autoridad impugnabile a través del juicio de amparo, ya que se traduce en el ejercicio de una potestad administrativa, expresión de una relación de supra a subordinación, que tiene su origen en una disposición integrada al orden jurídico nacional y que implica un acto unilateral, lo cual hace innecesario acudir a los tribunales ordinarios para que surtan efectos las consecuencias jurídicas impuestas por el órgano decisor sin el consenso del afectado.”

No obstante, este criterio ha sido abandonado por la propia Segunda Sala de la SCJN, al sostener que en relación a los actos jurídicos del Rector, el Presidente o el Secretario del Consejo de las Unidades Académicas, que con tal

calidad intervengan en la elección de un nuevo director de cualquiera de aquéllas y que afecten a un gobernado al separarlo definitivamente del consejo respectivo, no tienen el carácter de autoridad pues, según su criterio, no ejercen un poder público que afecte de manera unilateral la esfera jurídica de un sujeto de derecho, ya que se trata de una decisión derivada, precisamente, de la autonomía de que se encuentra investido dicho órgano. En tal sentido, la tesis aislada cuyos datos de identificación, rubro y texto, en seguida se mencionan:

“Novena Época, Registro: 166045, Instancia: Segunda Sala, Tesis Aislada, Fuente: Semanario Judicial de la Federación y su Gaceta, XXX, Octubre de 2009, Materia(s): Administrativa, Tesis: 2a. CXIII/2009, página: 135

UNIVERSIDAD MICHOACANA DE SAN NICOLÁS DE HIDALGO. SU COMISIÓN DE RECTORÍA NO TIENE EL CARÁCTER DE AUTORIDAD PARA EFECTOS DEL JUICIO DE AMPARO, AL NOMBRAR A SU RECTOR. La Segunda Sala de la Suprema Corte de Justicia de la Nación ha determinado en diversos precedentes que, para estimar que se ha realizado un acto de autoridad para efectos del juicio de amparo, es necesaria la existencia de un órgano del Estado que establece una relación de supra a subordinación con un particular; que esa relación tenga su nacimiento en la ley, que dote al órgano del Estado de una facultad administrativa, cuyo ejercicio es irrenunciable al ser de naturaleza pública la fuente de tal potestad; que con motivo de esa relación emita actos unilaterales a través de los cuales crea, modifica o extingue por sí o ante sí, situaciones jurídicas que afectan la esfera legal del particular y que para emitir esos actos no requiere de acudir a órganos judiciales ni precisa del consenso de la voluntad del afectado. Asimismo, el Pleno de este Alto Tribunal, al interpretar la fracción VII del artículo 3o. de la Constitución Federal, precisó que las universidades públicas son organismos públicos descentralizados con autonomía especial, que implica autonormación y autogobierno, atendiendo a la necesidad de lograr mayor eficacia en la prestación del servicio que les está atribuido y que se funda en la libertad de enseñanza, sin que ello implique, de manera alguna, su disgregación de la

estructura estatal, ya que se ejerce en un marco de principios y reglas predeterminadas por el propio Estado, restringida a sus fines; de tal manera que la autonomía universitaria, manifestada en su facultad de autogobierno, dota a las universidades de capacidad para, entre otras cosas, tomar decisiones definitivas al interior del cuerpo universitario, con independencia de cualquier órgano interior. En este orden, el examen de los artículos 1o., 2o., 8o., 9o. y 12 de la Ley Orgánica de la Universidad Michoacana de San Nicolás de Hidalgo permite sostener que la Comisión de Rectoría de dicha Universidad es una de sus autoridades administrativas y, por ende, depositaria de su gobierno, por lo cual en ejercicio de la competencia ejecutiva de esa casa de estudios derivada de la autonomía que la Constitución General de la República le confiere, posee la atribución de designar al Rector; luego, el mecanismo conforme al cual la Comisión de Rectoría lleva a cabo el nombramiento de Rector constituye un procedimiento interno que deriva de la facultad de autogobierno y autonomía de la que goza la citada universidad. Por lo tanto, no puede tenerse como autoridad responsable para efectos del juicio de amparo a la señalada Comisión de Rectoría de la Universidad Michoacana de San Nicolás de Hidalgo, pues atendiendo a la naturaleza jurídica del nombramiento del Rector de la citada Universidad, se llega a la conclusión de que aquella autoridad, a través de tales actos, no ejerce un poder público que afecte de manera unilateral la esfera jurídica del quejoso, máxime que la posición del aspirante a ese encargo no es la de gobernado para efectos del juicio de garantías, ya que se trata de una decisión derivada precisamente de la autonomía de que se encuentra investido dicho órgano.”

Su criterio ha encontrado seguidores, pues otro Tribunal Colegiado de Circuito básicamente decidió en el mismo sentido, como puede observarse a la lectura de la siguiente tesis aislada cuyos datos de identificación, rubro y texto, son los siguientes:

“Novena Época, Registro: 172287, Instancia: Tribunales Colegiados de Circuito, Tesis Aislada, Fuente: Semanario Judicial de la Federación y su

Gaceta, XXV, Mayo de 2007, Materia(s): Laboral Tesis: XIX.2o.A.C.45 A,
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UNIVERSIDAD AUTÓNOMA DE TAMAULIPAS. EL RECTOR Y OTROS FUNCIONARIOS NO TIENEN EL CARÁCTER DE AUTORIDADES PARA LOS EFECTOS DEL JUICIO DE AMPARO, CUANDO SEPARAN DE MANERA DEFINITIVA A UN REPRESENTANTE ACADÉMICO DEL CONSEJO RESPECTIVO. La Segunda Sala de la Suprema Corte de Justicia de la Nación, en la jurisprudencia 2a./J. 102/2002, publicada en la página 298, Tomo XVI, octubre de 2002, Novena Época del Semanario Judicial de la Federación y su Gaceta, con el rubro: “UNIVERSIDADES E INSTITUCIONES DE EDUCACIÓN SUPERIOR AUTÓNOMAS POR LEY. LOS CONFLICTOS ORIGINADOS CON MOTIVO DE LAS RELACIONES LABORALES CON SU PERSONAL ADMINISTRATIVO Y ACADÉMICO, DEBEN RESOLVERSE POR LAS JUNTAS DE CONCILIACIÓN Y ARBITRAJE.”, estableció que los conflictos entre las universidades autónomas y sus trabajadores deben ser dilucidados ante una Junta de Conciliación y Arbitraje, lo que de ningún modo implica violación a la autonomía universitaria en lo que se refiere a su facultad para fijar el ingreso, promoción y permanencia de su personal académico y administrativo. En ese tenor, aquellos individuos de la Universidad Autónoma de Tamaulipas, como son el rector, el presidente o el secretario del Consejo de las Unidades Académicas, que con tal calidad intervengan en la elección de un nuevo director de cualquiera de aquéllas y con ello afecten a un representante académico al separarlo definitivamente del consejo respectivo, no tienen el carácter de autoridad para los efectos del juicio de amparo, porque no actúan investidos de imperio, sino equiparados a un patrón, en una relación de coordinación, cuyo conflicto debe ser resuelto ante la instancia laboral que corresponda.”

Manifestamos nuestra inconformidad con dicho criterio pues la H. Segunda Sala de la SCJN no toma en cuenta que las universidades públicas autónomas en México son organismos públicos descentralizados y que como

tales son integrantes de la administración pública, según la ley que los origina, y que actúan por medio de sus representantes, los que realizan actos de autoridad que deben subordinar a las normas y principios constitucionales que rigen la actuación de cualquier órgano del Estado. En efecto, los actos de las autoridades universitarias pueden afectar unilateralmente la esfera jurídica de los gobernados, en la medida en que no se apege a lo dispuesto en la legislación y en la Constitución General de la República, por ejemplo, si carecen de la debida motivación y fundamentación que exige el artículo 16 de nuestra Carta Magna, en cuya ausencia procede el Juicio de amparo.

CONCLUSIONES

PRIMERA: La Autonomía Universitaria en México es un derecho fundamental, público, subjetivo, por virtud del cual las Instituciones de Educación Superior Autónomas, por Ley, demandan frente al poder político del Estado y otros sujetos de derecho, el respeto a su facultad y responsabilidad de gobernarse a sí mismas para realizar sus fines de educar, investigar y difundir la cultura.

SEGUNDA: Las Universidades Públicas Autónomas en México son Organismos Públicos Descentralizados, federales o locales, según la ley que los origina, con personalidad jurídica, patrimonio propio, libertad orgánica y técnica para el desempeño del servicio público de educación superior y la capacidad de decisión que se les confiere se encuentra subordinada a las normas y principios constitucionales que rigen la actuación de cualquier órgano del Estado.

TERCERA: Los actos de las autoridades universitarias pueden afectar unilateralmente la esfera jurídica de los gobernados, en la medida en que no se apeguen a lo dispuesto en la legislación y en la Constitución Política de los Estados Unidos Mexicanos, si carecen de la debida motivación y fundamentación que exige el artículo 16 de la Carta Magna, en cuya ausencia procede el Juicio de amparo.

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