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UNIVERSITY OF CENTRAL AFRICA

A Dissertation
Presented in Partial Fulfillment
of Requirements for the Degree
Doctor of Philosophy

by
Phénias Bahimba

January 1984
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ABSTRACT

POTENTIAL GOALS OF THE NATIONAL UNIVERSITY OF RWANDA AS PERCEIVED BY SENATE MEMBERS, FACULTY, AND STUDENTS, WITH IMPLICATIONS FOR THE ADVENTIST UNIVERSITY OF CENTRAL AFRICA

by

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Title: POTENTIAL GOALS OF THE NATIONAL UNIVERSITY OF RWANDA AS PERCEIVED BY SENATE MEMBERS, FACULTY, AND STUDENTS, WITH IMPLICATIONS FOR THE ADVENTIST UNIVERSITY OF CENTRAL AFRICA

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Date completed: January 1984

Problem

The Republic of Rwanda granted the request of the Seventh-day Adventist Church to establish and operate a private university. Rwanda agreed to provide land and recognize degrees and diplomas. The church agreed to have its programs approved by the Ministry of Higher Education. This study was to identify and determine the potential goals of higher education in Rwanda that could serve as guidelines for the Adventist University of Central Africa.

Method

The population included all twenty-eight academic senate members, 110 faculty members, and 285 randomly selected students enrolled.
at the National University of Rwanda (1981-82 school year).

The data-gathering instrument used was the French version of the Institutional Goals Inventory.

Two statistical methods were used: descriptive analysis, and analysis of significance using the t-test for correlated samples, one-way analysis of variance, and the Scheffé a-posteriori test.

Summary of Major Findings

The major findings were as follows:

All rating groups unanimously agreed that there was a discrepancy between "Is" and "Should Be" in each goal statement and goal area.

All unanimously agreed on the highest need priority-goal statement in the following areas: Individual Development, Humanism/Altruism (top-ranking priority), Vocational Preparation, Advanced Training, Research, Meeting Local Needs, Democratic Governance, and Innovation.

There was a significant difference between the means of "Is" and "Should Be" goals in each of the fourteen goal areas and among the perceptions of the senate, faculty, and students.

Conclusions

It would appear from the consensus of discrepancies between "Is" and "Should Be" goals that the institution was in need of improvement.

These should provide an agenda for study of goals and programs for the Adventist University of Central Africa.

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Recommendations

It is suggested that the Adventist University of Central Africa consider the following recommendations:

1. Use this study as a framework for developing goals and curricula
2. Determine the religious, intellectual, occupational, physical, and social goals consistent with the purposes of Adventist higher education
3. Direct goals to meet the needs of the Adventist society in francophone Africa
4. Include representatives from local Adventist churches in the process of goal identification and determination of priorities
5. Conduct a similar study at the conclusion of the first academic year, and thereafter at regular intervals to facilitate self-study and evaluation
6. Undertake a study to assess continuing-education need for personal and professional development of the worker force of the church in francophone Africa.
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CHAPTER I

INTRODUCTION

The Seventh-day Adventist Church in francophone Africa has a membership of 269,086 (SDA Yearbook, 1983). Charles Taylor (1983), director of the Department of Education of the General Conference of Seventh-day Adventists, has advised that the church is operating 147 primary and 27 secondary schools as well as one seminary in French-speaking Africa, but it does not maintain any other educational institutions of higher learning. The need for a church-sponsored institution of higher education, designed to meet the needs of the church and its members, has been under serious consideration since the early 1970s.

The "Report on the French Education Commission for Africa" (1972) recommended to the General Conference of Seventh-day Adventists that a French-speaking institution of higher education be established on the African continent. The report emphasized that this institution should meet government standards and requirements and receive government recognition.

A memorandum from the General Conference secretary (1974) shows that the General Conference Committee voted to designate Cameroun Training School, Nanga-Ekobo, as the appropriate site for an Adventist francophone institution of higher learning in Africa. This school was established, but it became a seminary offering only
theology. At the Francophone Theological Education Committee meeting (1976), Merle L. Mills, the Trans-Africa Division president, pointed out that there was a great need in his division not only for trained ministers but also for professional teachers, treasurers, accountants, and administrators.

The laws of Cameroun would not permit Nanga-Eboko to offer anything except theology. Because of this, it was impossible to satisfy the manpower needs of the Seventh-day Adventist Church in the French-speaking African countries. A plan was drawn up specifying that what francophone Africa needed was an institution of higher learning, offering programs to educate both secondary-school teachers for all French-speaking schools in Africa and professional French-speaking Africans. This would involve offering majors in French, English, social studies, mathematics, the sciences, business, etc.

The Trans-Africa Division took the initiative and made a request to the governments of the French-speaking countries in its territory, asking to be allowed to establish a private but government-recognized university. The government of the Republic of Rwanda was the only country that granted this request. Rwanda also provided land for the proposed university. A report from Richard Hammill (1978), who conducted an interview with the secretary general of the Ministry of Education, indicated that private institutions are both legally and by practice a part of the educational system of Rwanda, and that the Rwanda government can grant recognition to a private institution that maintains a standard on the level with the state university and that follows the laws of the Republic of Rwanda pertaining to higher education.
Fig. 1. Africa-Indian Ocean Division Context Map

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A charter was prepared and signed (Convention Relative à l'Université Adventiste au Rwanda, 1979) by the government and the Seventh-day Adventist Church. In this charter, the government of the Republic of Rwanda committed itself to authorizing the Seventh-day Adventist Church the right to establish and operate a university.

The government required the church—and the church agreed—to follow the laws of the land pertaining to higher education and to have its programs, prior to their implementation, approved by the Ministry of Higher Education. This plan and commitment made by the Trans-Africa Division became the responsibility of the Africa-Indian Ocean Division created in 1980.

Statement of the Problem

The Republic of Rwanda was the only French-speaking country in Africa to grant the request of the Seventh-day Adventist Church to establish and operate a private university. The government committed itself to provide land and to recognize degrees and diplomas bestowed by the proposed university. The church was required—and it agreed—to follow the laws of the land pertaining to higher education and to have its programs, prior to their implementation, approved by the Ministry of Higher Education.

If the Seventh-day Adventist Church wants to efficiently carry out its plans of establishing the proposed Adventist University of Central Africa and to have them approved by the Ministry of Higher Education of Rwanda, it is faced with the task of developing goals and programs that will meet some of the needs in Rwanda.

As far as can be ascertained, no research has been undertaken
to identify and determine the potential goals of higher education in Rwanda that could become the bases of the goals and programs for the Adventist University of Central Africa.

Purpose of the Study

The purpose of this study was to identify and determine the potential goals of the National University of Rwanda and to present them in their order of priority—with a view toward developing goals, objectives, and programs for the Adventist University of Central Africa now under construction. Specifically, it attempted to identify, determine, and establish priorities among the following fourteen goal areas. The first ten are outcome and the last four are process goal areas. Each of them consists of four goal statements, making a total of fifty-six statements.

A. Outcome Goals

1. Academic Development
2. Intellectual Orientation
3. Individual Personal Development
4. Humanism/Altruism
5. Cultural/Altruism
6. Vocational Preparation
7. Advanced Training
8. Research
9. Meeting Local Needs
10. Public Service

B. Process Goals

11. Democratic Governance
12. Community
13. Intellectual/Aesthetic Environment
14. Innovation
Significance of the Study

It is anticipated that the results of this study will serve as guidelines for the goals, objectives, and curriculum development of the Adventist University of Central Africa. It could serve to create an awareness of the programs needed to meet the expectations of the Rwandan government thus fulfilling the commitment of the church. Conrad (1974) fittingly states that "when an organization is primarily dependent upon the external environment for its license to act, and for protection, then mandates . . . become important constraints on organizational operative goals" (p. 509).

It may be worth mentioning that of the 269,086 church members in French-speaking Africa, 137,092 are from the Central African Union which is made up of the Republics of Rwanda and Burundi; whereas, 90,113 come from the Zaire Union which encompasses the Republic of Zaire, a neighboring country of Rwanda and Burundi, thus making a total of 227,205 Adventists within the two unions. The Republic of Rwanda is the host country of the proposed university.

Theoretical Basis for the Study

Tyler (1950) developed the rationale for curriculum development that served as the basis for the theoretical framework of this study. He begins his theory by identifying four fundamental questions which, as he puts it, must be answered in developing any curriculum and plan for instruction. They are the following:

1. What educational purpose should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?

4. How can we determine whether those purposes are being attained?

Tyler's theory was limited to the methods for studying these questions. He did not attempt to answer them but gives an explanation of the procedures by which they could be answered. He asserts that many educational programs are established without clearly defined purposes. He recommends that if an educational program is to be planned and if efforts for continued improvement are to be made, it is highly necessary to have some conception of the desirable goals. He underscores his rationale claiming that all aspects of the educational program are really the means to accomplish basic educational purposes. Hence, if one is to study an educational program systematically and intelligently, one must first be sure of the exact nature of the educational objectives aimed at. Tyler recognizes that goals are value judgments—judgments especially of those responsible for the school. He points out that a comprehensive philosophy of education is necessary as a guide in making these judgments. When the necessary information and knowledge are available to those who are making decisions about goals and objectives, the probability is increased that judgments about objectives will be wiser and that school goals will have greater significance and greater validity (p. 3).

According to Tyler, no single source of information is adequate as a basis for wise and comprehensive decisions about the goals of the school. He points out three sources of information on educational goals:
1. **Studies of the learners themselves.** Tyler is of the opinion that the needs and interests of the students should function as the basis of goal setting for an educational institution. He clarifies his rationale, saying that a study of such needs would involve identifying those needs that are not being properly satisfied and would involve an investigation of the role the school can play in helping meet the students' needs (p. 5). Tyler's understanding of the term needs is that needs are "the gap between what is and what should be." He is of the opinion that the schools' efforts should be focused particularly upon serious gaps revealed in the development of students. Hence, Tyler emphasizes that studies identifying those gaps, those educational needs, are necessary to provide a basis for the selection of goals and objectives which should be given priority in school programs (pp. 5-6).

Tyler says fittingly that in order to obtain a clear picture of the needs of students, the researcher might consider the school with which he is most familiar, outlining specific investigations to be conducted within his school that would produce appropriate information about the needs of students—thus illuminating the goals and objectives of that school. This is well in line with the idea of conducting this study to determine potential goals of the National University of Rwanda, thus providing information on possible goals for the Adventist University of Central Africa now under construction in Rwanda.

2. **Studies of contemporary life outside the school.** The second source of information on educational goals that Tyler suggests is the study of contemporary life outside the school. The rationale for this is that school cannot offer programs for all that is expected by scholars. Therefore, a look at the contemporary life in the area the school
serves is an indispensable source of information to apply toward educational goals and objectives.

Tyler is of the opinion that goal priorities should be determined. He asserts that contemporary life is very complex, and because of this it is absolutely necessary to focus educational efforts upon life's critical aspects. Information on current complexities can help educators avoid wasting the student's time—by ignoring issues that are no longer significant and by focusing on neglected areas for which the schools currently provide no preparation (p. 12).

Tyler states that in studying the school's context, as in studying the learner's needs, it is necessary to divide life into various phases, providing manageable areas for investigation. He emphasizes that unless life is approached through functional and significance phases, it is too big to be attacked, and any efforts in studying it will result in many gaps. In accordance with Tyler's rationale, this study endeavored to determine potential goals of the National University of Rwanda using fourteen goal areas and presenting them in their order of priority.

3. **Suggestions about goals and objectives from subject specialists.** Tyler offers subject specialists as the third source of input on educational goals and objectives. He makes it clear that in order for specialists to make valuable suggestions, the researcher must ask adequate questions. The rationale here is that they possess a considerable knowledge of specialized fields, and many of them have had opportunity both to see what their field has done for them and for those with whom they work.

Again, consistent with Tyler's theory, the respondents for
this study were: faculty, students, and members of the academic
senate, the highest academic and curriculum council of the National
University of Rwanda which oversees the development, evaluation, and
approval of curriculum programs offered at the university.

**Delimitation of the Study**

This study was limited to the students, faculty, and academic
senate members of the National University of the Republic of Rwanda.
It covered fourteen goal areas: ten outcome and four process goal
areas, each of which has four goal statements.

**Basic Assumption**

It was assumed that students, faculty members, and academic
senate members of the National University of Rwanda (a government
institution) are the best-informed persons available to identify the
potential goals of the National University of Rwanda.

**Definition of Terms**

In order to minimize misunderstanding which may arise from
varying interpretations placed on certain key words and phrases, a
goal-areas description and definition of terms are provided below.

**Goal-Areas Descriptions**

Peterson and Uhl (1977) describe goal areas as follows:

**Academic Development** has to do with the acquisition of general
and specialized knowledge, preparation for advanced scholarly study,
and maintenance of higher intellectual standards on the campus.

**Intellectual Orientation** means familiarity with research and
problem-solving methods, the ability to synthesize knowledge from many
sources, the capacity for self-directed learning, and commitment to lifelong learning.

**Individual Personal Development** means identification by students of personal goals, the development of ways of achieving them, and enhancement of a sense of self-worth and self-confidence.

**Humanism/Altruism** reflects a respect for diverse cultures, a commitment to working for world peace, a consciousness of the important moral issues of the time, and a concern for the welfare of man generally.

**Cultural/Aesthetic Awareness** entails a heightened appreciation of a variety of art forms, required study in the humanities or arts, and encouragement of active student participation in artistic activities.

**Vocational Preparation** means offering opportunities for retraining or upgrading skills and specific occupational curriculum programs geared to emerging career fields.

**Advanced Training** can be most readily understood simply as the availability of postgraduate education. It means developing and maintaining a strong and comprehensive graduate school which provides programs in the professions and conducts advanced study in specialized problem areas.

**Research** involves conducting basic research in the natural and social sciences and seeking generally to extend the frontiers of knowledge through scientific research.

**Meeting Local Needs** is defined as providing for continuing education for adults, serving as a cultural center for the community, providing trained manpower for the local employers, and facilitating student involvement in community-service activities.

**Public Service** means working with government agencies in social
and environmental policy formation, committing institutional resources to the solution of major social and environmental problems, and generally being responsive to national priorities in planning educational programs.

**Democratic Governance** means decentralized decision-making arrangements by which students, faculty, administrators, and academic senate members can all be significantly involved in campus governance; opportunity for individuals to participate in all decisions affecting them; and governance that is genuinely responsive to the concerns of everyone at the institution.

**Community** is defined as maintaining a climate in which there is faculty commitment to the general welfare of the institution, open and candid communication, open and amicable airing of differences, and mutual trust and respect among students, faculty, and administrators.

**Intellectual/Aesthetic Environment** means a rich program of cultural events, a campus climate that facilitates student free-time involvement in intellectual and cultural activities, an environment in which students and faculty can easily interact informally, and a reputation as an intellectually exciting campus.

**Innovation** is defined as a climate in which continuous innovation is an accepted way of life; it means established procedures for readily initiating curricular or instructional innovations; and, more specifically, it means experimentation with new approaches in individualized instruction and in evaluating and grading student performance.

**Other Terms Defined**

The **Seventh-day Adventist Church** is defined in the **Seventh-day Adventist Encyclopedia** (1976) as:
... a conservative Christian body, worldwide in extent, evangelical in doctrine, and professing no creed but the Bible. It places strong emphasis on the Second Advent, which it believes is near, and observes the Sabbath of the Bible, the seventh day of the week. These two distinguishing points are incorporated into the name Seventh-day Adventist. (10:1325)

The term church is substituted occasionally for the full name of the Seventh-day Adventist Church in this study.

General Conference is an abbreviation of the full name General Conference of Seventh-day Adventists and refers to the church world headquarters located in Washington, D.C., United States of America.

A division, next to the General Conference, is the largest administrative unit of the Seventh-day Adventist Church.

Trans-Africa Division was the name of the administrative unit of the Seventh-day Adventist Church, which, according to the Seventh-day Adventist Yearbook (1978) at the time the university was proposed, included Botswana, Burundi, Lesotho, Malawi, South Africa, Zimbabwe (formerly Rhodesia), Rwanda, Namibia (Southwest Africa), Swaziland, Zaire, Zambia, Ascension, St. Helena, and Tristan de Gunha Islands.

Africa-Indian Ocean Division is the name of the administrative unit of the Seventh-day Adventist Church, which, according to the Seventh-day Adventist Yearbook (1983), was created in 1980. It includes the following countries: Benin, Burundi, Cape Verde Islands, Central African Republic, Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory-Coast, Liberia, Mali, Mauritania, Mahore (Mayotte), Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Togo, Cameroun, Upper Volta, Zaire, Comoros, Madagascar, Mauritius, Reunion, Seychelles Islands.
Goal means a desired condition either to be achieved or maintained.

Instrument, as used in this study, is used interchangeably with tool. It means a device used for eliciting information, a questionnaire prepared to which selected persons are invited to respond.

Institutional Goals Inventory (IGI) is a research instrument available at the Educational Testing Service (ETS) in Princeton, New Jersey, United States of America.

Academic Senate Members is the term used in this study to mean members of the highest academic and curriculum council of the National University of Rwanda. According to the Annuaire (Yearbook) (1980), this academic senate is in charge of maintaining high quality academic standards. It develops, evaluates, and approves curriculum programs offered at the university. This term is hereafter referred to as senate.

Is, as used in this study, means the actual or present situation of the institution as perceived by the raters.

Should Be is used in the study to mean the ideal situation desired by the respondents in the institution. It is abbreviated as SB in the tables.

Statement of Hypotheses

Hypothesis 1

There is a significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by senate members. This hypothesis relates to fourteen separate goal areas, and hence requires fourteen sub-hypotheses, a to n.
Sub-hypothesis 1a

There is a significant difference between "Is" and "Should Be" goals for "Academic Development" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1b

There is a significant difference between "Is" and "Should Be" goals for "Academic Orientation" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1c

There is a significant difference between "Is" and "Should Be" goals for "Individual Personal Development" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1d

There is a significant difference between "Is" and "Should Be" goals for "Humanism/Altruism" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1e

There is a significant difference between "Is" and "Should Be" goals for "Cultural/Aesthetic Awareness" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1f

There is a significant difference between "Is" and "Should Be" goals for "Vocational Preparation" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1g

There is a significant difference between "Is" and "Should
Be" goals for "Advanced Training" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1h

There is a significant difference between "Is" and "Should Be" goals for "Research" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1i

There is a significant difference between "Is" and "Should Be" goals for "Meeting Local Needs" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1j

There is a significant difference between "Is" and "Should Be" goals for "Public Service" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1k

There is a significant difference between "Is" and "Should Be" goals for "Democratic Governance" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1l

There is a significant difference between "Is" and "Should Be" goals for "Community" of the National University of Rwanda as perceived by the senate members.

Sub-hypothesis 1m

There is a significant difference between "Is" and "Should Be" goals for "Intellectual/Environment" of the National University of Rwanda as perceived by the senate members.
Sub-hypothesis 1

There is a significant difference between "Is" and "Should Be" goals for "Innovation" of the National University of Rwanda as perceived by the senate members.

Hypothesis 2

There is a significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by the faculty members. This hypothesis was tested for each of the fourteen separate goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

Hypothesis 3

There is a significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by the students. This hypothesis was tested for each of the fourteen separate goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

Hypothesis 4

There is a significant difference among the responses of the academic senate faculty members and students with respect to the "Is" goals of the National University of Rwanda. This hypothesis is comprised of fourteen sub-hypotheses, a to n, relating to the fourteen separate goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

Hypothesis 5

There is a significant difference among the responses to the academic senate members, faculty, and students with respect to the "Should Be" goals of the National University of Rwanda. This
hypothesis is comprised of fourteen sub-hypotheses, a to n, related to the fourteen separate goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

**Organization of the Study**

This study was a goal determination study designed to find out present and ideal goals of the National University of Rwanda as perceived by the faculty members, academic senate members, and the students. It is organized into five chapters:

Chapter 1 presents the background of the study, the problem, the purpose and significance of the study, the theoretical basis for the study, the delimitation, the basic assumption, definition of terms, hypothesis and organization of the study.

Chapter 2 contains a review of the literature divided into two sections: the first section reviews the literature concerning the goals of higher education within the Seventh-day Adventist Church. The second section focuses on the review of literature and research, using the Institutional Goal Inventory tool to determine college or university goals and to establish their priorities.

Chapter 3 describes the procedures, collection of data, statement of hypotheses, and methods of analysis.

Chapter 4 contains the findings and the interpretation of the results.

Chapter 5 is devoted to the summary, conclusions, implications, and recommendations for the Adventist University of Central Africa.
CHAPTER II

REVIEW OF LITERATURE

The review of literature pertaining to potential goals of the institutions of higher learning is organized as follows: the first section reviews the literature concerning the goals of higher education in the Seventh-day Adventist Church. The second focuses on the review of literature and research using the Institutional Goals Inventory tool to determine college or university goals and to establish their priorities.

Review of Literature Pertaining to Goals of Seventh-day Adventist Higher Education

A review of literature reveals that the writings of Ellen G. White influence heavily the goals of higher education in the Seventh-day Adventist Church. She wrote:

True education means more than the pursual of a certain course of study. It means more than a preparation for the life that now is. It has to do with the whole being, and with the whole period of existence possible to man. It is the harmonious development of the physical, the mental, and the spiritual powers. It prepares the student for the joy of service in this world and for the higher joy of service in the world to come. (Education, p. 13)

She went on to say that

To restore in man the image of his Maker, to bring him back to the perfection in which he was created, to promote the development of body, mind, and soul . . . is the object of education, the great object of life. (Education, pp. 15-16)

She admonishes the church that it should provide an education
to its members "that they may be fitted for usefulness, and be qualified to occupy responsibilities in both private and public life" (Counsels to Parents, Teachers, and Students, p. 44). Ellen White reminds the youth studying in the Church's educational institutions that they are to reach the highest development of their mental powers (Ministry of Healing, p. 449). She recommends to the Adventist educators that students must obtain not only knowledge from books but knowledge of practical industry (Special Testimonies on Education, p. 92). She makes it clear that religious elements are to be the controlling power and the strength of the church's colleges (Testimonies, 5:14). Social development and self-knowledge are among the goals of education that Ellen White advocates (Counsels to Parents, Teachers, and Students, p. 67).

In conformity with Ellen G. White, the General Conference Department of Education (General Conference Working Policy, 1979 F) outlines the specific goal areas of the Seventh-day Adventist Church's educational system as being: religious, intellectual, occupational, aesthetic, physical, and social.

Their specific goals include the following:

--to maintain a campus environment favorable toward the spiritual, intellectual, social, and physical development of students

--to provide association for students with socially and religiously compatible young people who accept or are willing to abide by the moral and ethical standards of the church

--to provide religious education for the students who enroll in the university or college

--to encourage students to dedicate themselves to the service of God and humanity and to prepare themselves for such service

--to help students to participate diligently in the exploration of the unknown, thereby widening humanity's knowledge of life and nature

--to inspire students to intellectual excellence, creativity, and independent thought

--to further the application of knowledge and truth in a manner that will nurture wisdom and help the students to live creatively and responsibly

--to develop in each student a sense of responsibility and self-discipline

--to develop, in each student, a high quality of clear thinking and scholarly workmanship

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--to cultivate within students a wholesome respect for the
dignity of labor
--to help the students to achieve personal fulfillment in making
a contribution as an active member of society and the church
--to train students to appreciate and practice the highest levels
for culture and refinement
--to obtain leaders for the church and its enterprises and for
the vocations and professions which by their nature are service centered
--to cultivate in students tolerance and respect for the rights
and opinions of others
--to develop in each student vocational skills sufficient to
make living more meaningful
--to develop in each student the ability to plan, organize,
and direct activities toward successful conclusions.

The General Conference of Seventh-day Adventists, Department
of Education World Report (1979) emphasizes that all the church colleges
and universities around the world are to have the Bible as an integral
part of the curriculum and that vocational training is to be included
in their programs.

According to the Adventist Philosophy of Higher Education
(1973), the Seventh-day Adventist Church through its colleges and
universities seeks to provide God-centered, liberal, professional, and
vocational education.

Geraty (1974) points out that various institutions, professional
groups, nations, and individuals are reviewing today's goals of education
in an attempt to meet the needs of the church and of the society.
Smoot (1975) discusses tensions in American colleges and universities
during the 1960s. He quotes Truman, who identified one of the causes of these tensions as being a lack of consensus on priority goals.

Review of Other Literature and Completed Research

An exhaustive report made by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and entitled The Development of Higher Education in Africa (1963) concluded that in addition to its traditional functions and obligations to teach and to advance knowledge through research, the role of higher education in the social, cultural, and economic development of Africa must be:

1. to maintain adherence of loyalty to the world academic standards;
2. to ensure the unification of Africa;
3. to encourage elucidation of and appreciation for African culture and heritage and to dispel misconceptions of Africa through research and the teaching of African studies;
4. to develop completely the human resources necessary for meeting manpower needs;
5. to train the "whole man" for nation building; and
6. to evolve over the years a truly African pattern of higher learning dedicated to Africa and its people, yet promoting a bond of kinship to the larger human society.

This report further asserts (p. 12) that education in Africa is entirely or mainly centered on the study of foreign civilization. It reminds Africans that the mission of a university is to define and confirm the aspirations of the society which it is established to serve.

Winstead and Hobson (1971) emphasize that educational
institutions need clear and explicit goals to provide necessary focus and direction. They discuss the development of the Institutional Goals Inventory research techniques. Their description makes it clear that research on the goals and objectives in the field of higher education is not plentiful.

Peterson and Uhl (1972) state that the work of Gross and Grambish is the most significant early effort to examine the nature and structure of university goals. They developed their instrument in 1964. They attempted to study the perceptions of administrators and faculty concerning what the goals of the university are and what they should be at sixty-eight, nondenominational, Ph.D.-degree-granting universities in the United States. Gross and Grambish (1968) used an inventory consisting of forty-seven goal statements. Seventeen of them dealt with output goals and thirty dealt with support goals. They found a general agreement that the modern university was among the important institutional needs for American society.

This report further shows that in 1969 a shortened and revised version of the Gross and Grambish instrument was administered to a sample of administrators, faculty, and students at fourteen private liberal arts colleges. The study was designed to assist these institutions in better understanding their goals and in determining if a difference in goals existed between universities and small, private, liberal arts colleges of limited resources. According to Winstead and Hobson (1971), significant agreement was found among the respondents. The difference which existed between "Is" and "Should Be" responses indicated that the three groups shared common views concerning the direction of many of the desired changes. Winstead and Hobson further report
that another noticeable trend among researchers interested in determining institutional goals during the late 1960s was the use of the Delphi method. This research technique was first used about twenty years before Winstead and Hobson's discussion. The purpose of this tool is to elicit opinions from different persons without bringing them together in a face-to-face confrontation.

Winstead and Hobson indicate that a modified version of the Delphi was used in 1969-70 by the Educational Testing Service in their planning of a university to be built in the U.S. Midwest. The modified tool was used to determine goals to be developed for the new university.

The same authors give credit to Peterson and Uhl who conducted a goal study for the Educational Testing Service during 1970. The purpose of their study was to investigate in diverse institutions what various constituencies perceived as the goals of their institution as compared with what they perceived the goals should be. Five institutions were selected for this study. Winstead and Hobson state that the instrument used in this study was a preliminary version of an Institutional Goals Inventory developed by the Educational Testing Service.

Witkin (1977) also points out that the Institutional Goals Inventory (IGI) is available at the Educational Testing Service as a tool to help college and university communities delineate goals and establish priorities among them. She states that over 250 colleges and universities have used the IGI.

Gillo, Landerholm, and Goldsmith (1974) state that one of the problems facing colleges today is the limitation of funds. They suggest
that because of limited resources, today's colleges and universities are forced to set certain goals as priority goals in order to maximize the use of these limited resources. They conducted a study designed to assess actual as well as preferred goal priorities in a system of community colleges, comparing the views of faculty, administrators, and board of trustees, and providing feedback about which community college goals are most likely to be met. The findings show that the ideal college for all three groups is one which stresses quality, vocational programming for a limited number of students, and places a major emphasis on the provision of guidance counseling to the students.

The state of California (1972) conducted a study to identify potential goals of its higher education. Seven constituent groups were surveyed and 116 institutions took part in this study. It found that most of the constituencies preferred that academic development be given greater importance. Intellectual orientation was among the goals that received the highest consensus of support.

Quinn (1972) addressed himself to the identification of goals of public higher education in Massachusetts. The instrument was the Institutional Goals Inventory, adapted to suit the nature and purpose of his study. The adapted instrument contained forty-eight goal statements divided into twelve goal areas. The report of his study shows that the respondent groups preferred that the academic disciplines be de-emphasized, the community colleges be concerned primarily with career programs, and that the state colleges continue to offer career programs with more emphasis on the intellectual than the vocational.

Choi and Lyons (1973) sought to identify goals at Frostburg State College. They used the Institutional Goals Inventory. Findings
indicate that Frostburg State College sees intellectual orientation as its highest priority. The study also found that students place much more value on the importance of graduate education than do faculty or administrators.

Margaret (1981) made an attempt to determine goals for a rural community college and to establish priorities for long- and short-range planning. The Community College Goals Inventory (CCG) instrument was used for the purpose of her study. She analyzed findings to determine those areas with the highest discrepancy between existing and ideal conditions. The areas that received high discrepancy ratings include vocational preparation, counseling, humanism/altruism, effective management, secure parking, and basic skill instruction.

The purpose of the investigation conducted at Allegany (1974) was to determine institutional goals of the Allegany Community College, using the Institutional Goals Inventory (IGI) instrument. The overall findings show that the average mean differences between "Is" and "Should Be" were greater for the goal areas of intellectual orientation, individual personal development, humanism/altruism, vocational preparation, community, and intellectual and aesthetic environment.

An investigation made by Raab (1974) sought to determine and compare perceptions of the importance of "Is" and "Should Be" of goals of Nassau Community College. The instrument used to collect the data was the Institutional Goals Inventory, with an insert of twenty local goal items. The following are some of the major findings of the study:

The administrators demonstrated a desire to give more consideration to community concerns; faculty concentrated on areas involving
academic intellectual consideration; and students identified greater needs in areas of personal welfare and development.

There was a consensus among all groups that a high quality education at low tuition should be the primary goal of the college. A sense of community ranked second as a "Should Be" goal; ability to transfer to a four-year institution ranked third; special counseling in educational and vocational areas for day and evening students was fourth.

Kashmeeri (1977) sought to identify goals of higher education in Saudi Arabia by investigating the difference of goal perception that existed among the students, faculty, and administrators of three major universities in Saudi Arabia. He found the Institutional Goals Inventory translated into Arabic and modified to accommodate cultural differences and background, suitable for his study. The adapted copy of the instrument consisted of twenty goal areas.

The findings indicated that the three universities differ significantly on seventeen of twenty goal areas covered in this study. The responses of the students produced the apparent difference, whereas faculty and administrators did not differ.

Rigdon (1978) attempted a study to identify commuter students' perceptions of Northeastern Illinois University. The primary purpose of her study was to determine and describe commuter students' satisfaction with university activities and to determine significant differences in satisfaction levels among students. She used the Institutional Goals Inventory (IGI). Students were given a series of goal statements to which they were to respond in two ways: first, they were to indicate their opinions concerning the appropriateness of each statement as a
university goal; then they were to evaluate the extent to which they felt the university faculty and administration actually assigned importance to the stated goal. The possible values ranged from 1 (of no value) to 5 (of extreme importance).

The goals the students felt were most important are given below in the order of priority: (1) the guarantee of a certain level of accomplishment in reading, writing and mathematics, (2) the teaching of tools used for scholarly analysis and problem definition and resolution, and (3) the development of a career-oriented degree program. The least important goals according to the ranking process were: (1) an increase in support for remedial programs, (2) the development of alternative extension/weekend programs, and (3) the expansion of service to the culturally disadvantaged students.

In research conducted by Simmons (1980) of the State University College of Potsdam, an attempt was made to explore perceptions regarding campus goals of the university college using the Institutional Goal Inventory. It was administered to teaching faculty, non-teaching professionals and administrators, off-campus groups (alumni and college council members), and students.

Goal statements and goal areas under study were ranked from the highest to the lowest mean on both "Is" and "Should Be." Goal area discrepancies were computed and ranked. Those found to have the largest discrepancies were the following in their order of priority: (1) Community, (2) Intellectual Orientation, (3) Human/Altruism, (4) Individual and Personal Development.

The purpose of DeCristoforo's (1980) study was to find out
what current goal priorities were and what they should be ideally, to determine the goal areas that required the most change, and to establish the direction of emphasis needed at Kennesaw College. The Small College Goal Inventory (SCGI), a goal assessment tool developed by Educational Testing Service, was used to gather data. It was administered to thirty-two administrators and seventy-seven faculty members. Findings were reported by listing goal area means and standard deviations for "Is" and "Should Be" ratings, respectively, based on the total group of respondents. DeCristoforo covered twenty goal areas in his study. They were ranked according to "Is" and "Should Be" means, starting in both cases with the highest mean. Differences between "Is" and "Should Be" were calculated to find the discrepancy that existed between what goals were being emphasized and what goals needed ideally to be emphasized. The following were some of the findings:

Of the twenty goal areas ranked by the respondents, Academic Development, Intellectual Skills, and Continuing Education ranked highest on the "Is" scale; Intellectual Skills, Campus Community, and Academic Development ranked highest on the "Should Be" scale. Seven of the goal areas appeared to need a change in emphasis: Campus Community, Preparation for Lifelong Learning, and Intellectual Environment (all needing to be emphasized much more than they currently were), while Continuing Education, Vocational Preparation, Social/Political Responsibility, and Cultural/Aesthetic Awareness seemed to need de-emphasizing to various degrees.
Summary

The literature review focuses on the goals of higher education in the Seventh-day Adventist college and the non-Adventist college and university goal determination, as well as research using the Institutional Goals Inventory (IGI) technique.

The Seventh-day Adventist Church higher-education system shares with others the concern for preparing students for usefulness in their communities. It aims to offer programs that meet the needs of the community. However, its major concern is the integration of the Bible in the programs it offers. Thus, it puts a major emphasis on the spiritual dimension while other systems of higher education do not. That is, students are prepared to serve God and their fellow man as well as having the image of God restored in their lives (White, 1952, p. 15).

The non-Adventist literature review reveals that gone are the days when college or university administrators make "armchair" goal determinations and program development for their institutions of higher learning. Today, students, faculty, administrators, citizens, legislators, and trustees participate in the determination of goals for their higher educational institutions.

Since the late 1960s and throughout the 1970s, institutional goal determination has been one of the major concerns of many institutions of higher learning. The worldwide economical crisis seems to be among of the major factors that make it imperative for colleges and universities to identify their priority goals, toward which they may direct their limited resources.
An overall look at the review demonstrates that there are no priority goals unanimously agreed upon by all the colleges and universities. This may suggest that needs are different for different communities. Thus, each college or university has a duty to determine its own goals and assign priorities to them based on the needs of the community it is supposed to serve.

The literature reviewed also helped to substantiate the fact that the Institutional Goals Inventory (IGI) instrument developed in the early 1970s has been widely used throughout this last decade. It is not limited to any particular kind of institution of higher learning, and it has been proven reliable and valid. Hence, it provides a sound rationale for use in determining potential goals of the National University of Rwanda with a view to developing goals, objectives, and programs for the Adventist University of Central Africa.
CHAPTER III

METHODOLOGY AND PROCEDURES

Type of Research

The research designs selected for this study were the descriptive survey and analysis of variance methods. The description of population, instruments, procedure, and analysis of data is given below.

Population and Sample Size

The population used in this study included the twenty-eight members of the academic senate, 110 faculty members, and a random sample of 285 students selected from the total 1029 students enrolled at the National University of Rwanda during the 1981-82 school year.

Analysis of the data employed two systems of statistical analyses: descriptive survey, and analysis of variance. Therefore, a sample size of the student population appropriate for descriptive analysis was necessary, determined by using Krejcie and Morgan's (1970) table for determining sample size for any given population. When the population is known, no computations are needed to use the table. It is applicable to any defined population. The student population was 1029. Krejcie and Morgan's table shows 278 as an appropriate sample for a population of 1000 and 285 for the population of 1100. The student population of the National University of Rwanda falls in between. The sample size selected was 285 to guarantee a high power
for descriptive analysis. With the aid of the table of random numbers, sample units were selected from the student population of the National University of Rwanda.

In order to determine power analysis for the student sample, a conventional value of gamma corresponding to a medium sample \((\gamma = .5)\) was specified. Welkowitz, Ewen, and Cohen (1981) stated that this value is considered meaningful for a situation in which data does not allow for the estimate of an exact value of \(\gamma\). Thus \(\gamma = .5\) and \(\delta = .5\sqrt{N} = 8.441\). Therefore, power as a function of \(\delta = 8.441\) at \(<.05\) level of significance is \(.99\).

**Instrumentation**

The data gathering instrument for this study was the *Institutional Goal Inventory (IGI)* questionnaire obtained from the Institutional Research Program for Higher Education (Educational Testing Service). Winstead and Hobson (1971) state that Uhl developed it during 1970. It was designed as a tool which colleges and universities—including public universities, independent colleges, church-related institutions, and community colleges—may use in the process of identifying goals and in determining priorities among diverse goals. According to *The Colleges and Universities Administering the Institutional Goals Inventory, May 1972-June 1981* (Educational Testing Service [n.d.]), over 300 colleges and universities in the United States and Canada have used this research tool. The theoretical framework of the instrument consists of twenty goal areas divided into two categories: thirteen outcome goals and seven process goals. The whole inventory consists of ninety goal statements, four relating to each of the twenty goal
areas. An optional feature permits the addition of up to twenty goals to the inventory.

Witkin (1977) states that it is a self-administered, preprinted instrument designed to be administered to students, faculty, administrators, citizens, legislators, or trustees. Respondents rate all goals both as they exist on campus (Is) and as respondents would like them to exist (Should Be), using a five-point rating scale of importance: (1) of no importance, or not applicable; (2) of low importance; (3) of medium importance; (4) of high importance; (5) of extremely high importance.

Reliability and Validity of the IGI

Peterson and Uhl (1972) reported on the reliability and validity of the IGI. This instrument was developed for group rather than individual comparisons and analyses. Any researcher using it must be concerned with the concept of reliability, not in terms of individual responses, but in terms of group responses.

Reliability

In considering the reliability of the IGI, Peterson and Uhl say that the major concern was whether the goal areas were internally consistent. Specifically, it was to ascertain that the statements comprising each given goal area were all measuring a group's current perceptions ("Is" responses) or value opinions ("Should Be" responses) of each of the goal areas.

Coefficient alpha, a generalization of the Kuder-Richardson formula 20, was employed as the measure of internal consistency. The alphas were based on group means and were reported for each
goal area in terms of present importance ("Is" responses) and preferred importance ("Should Be" responses) for each respondent group. The alpha coefficients were presented in terms of a median alpha coefficient for the present ("Is" responses) and preferred ("Should Be" responses) ratings for each goal area. The median of these median internal consistency coefficients was .88 for present importance ("Is" responses) and .87 for preferred importance ("Should Be" responses). Of the forty median reliability estimates, all were .65 or above, thirty-eight were above .70, thirty-three were .80 or above, and eleven were .90 or above.

Peterson and Uhl (1972, p. 49) used another measure of reliability which was not dependent on the spread of responses. This was the standard error of measurement. The rationale for using this measure of reliability stemmed from the fact that, while the reliability coefficient was useful in comparing the reliability of the different goal areas, the standard error of measurement was more useful in interpreting group means.

The median of the median standard errors of measurement was .13 for the present ("Is" responses) ratings and .11 for the preferred ("Should Be" responses) ratings.

Intercorrelations among IGI Goal Areas

The intercorrelation for the present ("Is" responses) ratings and preferred ("Should Be" responses) ratings were analyzed for faculty, students, administrators, community, and trustees. The correlation for faculty and students was based on the means at 105 institutions, while those for administrators, community, and trustees
were obtained at 52, 88, and 26 institutions, respectively. These correlations range from .71 to .99 for faculty, .59 to .97 for students, .64 to .99 for administrators, .50 to .99 for community, and .67 to .98 for trustees.

Validity

Peterson and Uhl (1972) state that the validity of an instrument indicates whether it measures what it purports to measure. To ascertain the construct validity of the IGI, the following two tests were used:

1. **Convergent validity test.** This test indicates whether or not the instrument correlates highly with other variables with which it should theoretically correlate. The results of this validity test on the IGI showed that only one validity—between community and students—was not significant at the .01 level.

2. **Discriminant validity:** Discriminant validity was tested to show that the instrument does not correlate significantly with variables from which it should differ. The purpose of this test was to ascertain whether or not there should be more agreement between two groups rating the same area than between the same two groups rating different goal areas. There were only three goal areas having more than three discrepancies out of a possible 114. Thus, the IGI satisfied this measure of discriminant validity.

Procedure

This study involved the following procedure:

1. Review of related literature
2. Adaptation of the instrument

The Educational Testing Service granted permission (January
To adapt and reproduce the French-language version of the Institutional Goals Inventory to meet the purpose of this study. To adapt it, the English version of the instrument was distributed to fifteen African graduate students presently enrolled at Andrews University. They were asked to critically scrutinize each goal statement and to indicate whether it is relevant or not. The determination of relevancy was based on the majority of responses from these judges. The goal statements considered not relevant were improved or deleted according to their recommendations. Any adaptation was translated and included in the French version.

3. Pilot Testing

To determine whether the French version of the instrument would be understood by the respondents, a sample of four African French-speaking graduate students attending Andrews University were utilized for pilot testing. All of them served as teachers for three years or more in the secondary schools in Central Africa and are prospective faculty members at the Adventist University of Central Africa.

Collection of Data

To collect data pertaining to potential goals of the National University of Rwanda, the following procedures were followed:

1. The researcher personally visited the National University of Rwanda. Questionnaires containing possible goal statements for institutions of higher learning were hand-delivered to the students, faculty members, and academic senate members of the university.

2. Respondents were asked to fill out the questionnaires and
return them to the academic dean of the university where they were personally collected.

3. The researcher was available on the university campus to clarify any questions on the instrument.

4. A follow-up visit was made to secure returns from some of the respondents who failed to respond within two weeks, and until the desired number of returns were secured.

Methods of Analysis and Statement of Hypotheses

To determine potential goals of the National University of Rwanda, the data were analyzed utilizing descriptive statistics and statistical analysis of significance.

A. Descriptive method

Consistent with the Institutional Research Program for Higher Education, Educational Testing Service, the following descriptive analyses were done:

1. The means ($\bar{X}$) of "Is" and "Should Be" were computed for each goal statement and for each goal area. The higher the "Is" goal statement or goal area, the greater the importance attached to that goal or goal area compared with other goals or goal areas. The higher the "Should Be" mean of a goal statement or goal area, the greater the importance of that goal or goal area.

2. A listing of the discrepancies between the means of the "Is" and "Should Be" goal statements or goal areas were used to determine priorities among goal statements or goal areas. The Seventh-day Adventist Church should consider these priorities in developing
goals, objectives, and programs for the Seventh-day Adventist University of Central Africa.

3. Goal-area standard deviations were calculated to measure the degree to which each of the groups agrees on the importance of the goal or goal area. The lower the standard deviation, the greater the agreement, either as "Is" or "Should Be."

4. The discrepancies were computed and ranked for each goal area. Witkin (1977) points to the necessity of identifying areas of discrepancy and assigning priorities. She states that the assignment of priorities to the discrepancies is the final major component. It should generate information which is directly applicable to program planning.

5. Tables of goal statements and goal areas were presented and interpreted. Their meanings were assessed and related to the purpose of this study.

6. A Spearman rank correlation coefficient was calculated to determine if there is a relationship of the priority ranking order of the fourteen goal areas between perceptions of senate and faculty, senate and students, and faculty and students.

B. Statement of Hypotheses and Methods of Analysis

The following hypotheses are presented in the null form for the purpose of statistical significance analysis:

1. There is no significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by the senate. This hypothesis relates to fourteen separate goal areas, and hence requires fourteen sub-hypotheses, a to n, as follows.
Sub-hypothesis la

There is no significant difference between "Is" and "Should Be" goals for "Academic Development" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis lb

There is no significant difference between "Is" and "Should Be" goals for "Academic Orientation" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis lc

There is no significant difference between "Is" and "Should Be" goals for "Individual Personal Development" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis ld

There is no significant difference between "Is" and "Should Be" goals for "Humanism/Altruism" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis le

There is no significant difference between "Is" and "Should Be" goals for "Cultural/Aesthetic Awareness" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis lf

There is no significant difference between "Is" and "Should Be" goals for "Vocational Preparation" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis lg

There is no significant difference between "Is" and "Should
Be" goals for "Advanced Training" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis 1h

There is no significant difference between "Is" and "Should Be" goals for "Research" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis 1i

There is no significant difference between "Is" and "Should Be" goals for "Meeting Local Needs" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis 1j

There is no significant difference between "Is" and "Should Be" goals for "Public Service" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis 1k

There is no significant difference between "Is" and "Should Be" goals for "Democratic Governance" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis 1l

There is no significant difference between "Is" and "Should Be" goals for "Community" of the National University of Rwanda as perceived by the senate.

Sub-hypothesis 1m

There is no significant difference between "Is" and "Should Be" goals for "Intellectual/Environment" of the National University of Rwanda as perceived by the senate.
Sub-hypothesis 1

There is no significant difference between "Is" and "Should Be" goals for "Innovation" of the National University of Rwanda as perceived by the senate.

**Hypothesis 2**

There is no significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by the faculty. This hypothesis was tested for each of the fourteen separate goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

**Hypothesis 3**

There is no significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by the students. This hypothesis was tested for each of the fourteen separate goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

Hypotheses 1 to 3 were tested using the t test for means and correlated samples.

**Hypothesis 4**

There is no significant difference among the responses of the senate, faculty, and students with respect to the "Is" goals of the National University of Rwanda. This hypothesis is comprised of the fourteen sub-hypotheses, a to n, relating to the fourteen separate goal areas corresponding to those under hypothesis 1.

**Hypothesis 5**

There is no significant difference among the responses of the senate, faculty, and students with respect to the ideal "Should Be" of
the National University of Rwanda. This hypothesis is comprised of the fourteen sub-hypotheses, a to n, related to the fourteen separate goal areas corresponding to those under hypothesis 1.

Hypotheses 4 and 5 were tested using the analysis of one-way variance (ANOVA) at a .05 level of significance. In addition, the significant differences between all possible pairs of means for hypotheses 4 and 5 were tested using the Scheffé a-posteriori test, applied at a .10 level of significance as recommended by Scheffé (Ferguson, 1981).
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analyses and the data concerning potential goals of the National University of Rwanda as perceived by senate members, faculty, and students, with implications for the Adventist University of Central Africa. The purpose of the study was (1) to determine priority goals of the University, (2) to determine if there are significant differences in the perceptions of the three respondent groups between goals, and (3) to determine if there are significant differences in the perceptions of three respondent groups among themselves.

The Returns

To accomplish the purpose stated above, the Institutional Goal Inventory (IGI), French version, was adapted and used as a research tool. The researcher personally visited the National University of Rwanda where questionnaires containing possible goal statements for institutions of higher learning were hand delivered to all the 28 senate members, all 110 full-time faculty, and a randomly selected sample of 320 students of the National University of Rwanda. The respondents were asked to rate all goal statements both as they exist ("Is") and as they would like them to exist ("Should Be"). The following five-point rating scale of importance was used:
1. No importance or not applicable
2. Low importance
3. Medium importance
4. High importance
5. Extremely high importance

This study covered the following fourteen goal areas divided into two categories. Each goal area consisted of four goal statements for a total of fifty-six statements.

A. Outcome Goals
   1. Academic Development
   2. Intellectual Orientation
   3. Individual Personal Development
   4. Humanism/Altruism
   5. Cultural/Aesthetic Awareness
   6. Vocational Preparation
   7. Advanced Training
   8. Research
   9. Meeting Local Needs
  10. Public Service

B. Process Goals
   11. Democratic Governance
   12. Community
   13. Intellectual/Aesthetic Environment
   14. Innovation

Distribution and Returns of Questionnaires

The questionnaires were distributed to all 28 academic senate
members, all 110 faculty, and a randomly selected sample of 320 students. Of the 28 academic senate members, 26 (92.9 percent) returned the questionnaires. For the faculty, 86 (77.3 percent) returned usable questionnaires, while from the student sample, 285 (89.1 percent) responded, giving a total of 386 out of 458 individual respondents or 86.3 percent.

The data were first analyzed descriptively. Then five hypotheses were tested to analyze the significant differences between and among the responses of the various rating groups.

1. Descriptive analyses were used (a) to determine the "Is" and "Should Be" goals and goal areas and the discrepancies between the two, (b) to identify the highest need priority goals in each goal area, and (c) to determine the ranking order of the fourteen goal areas by each rating group separately.

2. A Spearman correlation coefficient was calculated to determine the degree of relationship in the fourteen goal area ranking need priorities between various pairs of the three rating groups.

3. The t-test for correlated samples was used to test hypotheses dealing with significant differences between "Is" and "Should Be" in each goal area for each respondent group.

4. One-way analysis of variance was used to test hypotheses having to do with significant differences among perceptions on "Is" and "Should Be" in each goal area among the three groups—senate, faculty, and students.

5. Scheffé's a-posteriori test was used to test the significance of differences between pairs of means.
Tables 1-14 provide findings on the four goals comprising each goal area. The tables show means of "Is" and "Should Be," and the discrepancies between the means of each goal statement. The discrepancy scores were arrived at by subtracting the mean of "Should Be" ratings from the mean of "Is" ratings for a given goal item or area in a given group. A negative discrepancy value indicates that the actual situation is below the ideal in the eyes of the respondents.

Table 1 indicates that all the three rating groups reported a discrepancy in all the four goals comprising the goal areas of "Academic Development." The table shows that the senate reported "to help students acquire depth of knowledge in at least one academic discipline" as the highest need priority. It was rated with -1.076 discrepancy. For the faculty, "to hold students throughout the institution to high standards of intellectual performance" was the top priority goal with a -.476 discrepancy. As for students, "to help students identify their own personal goals and develop means of achieving them" led the way in need priority with -.561 discrepancy.

Table 2 presents findings on the four goal statements in the area of "Intellectual Orientation." The table indicates that all three respondent groups felt that there was a discrepancy in each of the four goal statements. The table further shows that the senate placed top priority on "to teach students methods of scholarly inquiry, scientific research, and/or problem definition and solution." It was rated with a -1.961 discrepancy. Faculty and students unanimously placed the first need priority on "to increase the desire and ability of students to undertake self-desired learning." Faculty rated it with
### TABLE 1

**AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "ACADEMIC DEVELOPMENT"**

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISX</td>
<td>SBX</td>
<td>Disc</td>
</tr>
<tr>
<td>1. To help students acquire depth of knowledge in at least one academic discipline . . .</td>
<td>3.384</td>
<td>4.461</td>
<td>-1.076</td>
</tr>
<tr>
<td>4. To ensure that students acquire a basic knowledge in the humanities, social sciences, and natural sciences . . .</td>
<td>1.730</td>
<td>2.230</td>
<td>-.500</td>
</tr>
<tr>
<td>6. To prepare students for advanced academic work, e.g., at a graduate professional school . . .</td>
<td>4.076</td>
<td>4.346</td>
<td>-.269</td>
</tr>
<tr>
<td>9. To hold students throughout the institution to high standards of intellectual performance . . .</td>
<td>3.692</td>
<td>4.461</td>
<td>-.769</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy*
<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISX SBX Disc Rank</td>
<td>ISX SBX Disc Rank</td>
<td>ISX SBX Disc Rank</td>
</tr>
<tr>
<td>2. To teach students methods of scholarly inquiry, scientific</td>
<td>2.307 4.269 -1.961  1</td>
<td>2.813 4.116 -1.302  2</td>
<td>2.252 3.663 -1.410  2</td>
</tr>
<tr>
<td>research, and/or problem definition and solution . . .</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. To increase the desire and ability of students to undertake</td>
<td>2.961 3.500 -0.538  4</td>
<td>2.420 3.802 -1.372  1</td>
<td>1.989 3.652 -1.663  1</td>
</tr>
<tr>
<td>self-directed learning . . .</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. To develop students' ability to synthesize knowledge from a</td>
<td>3.346 4.230 -0.884  2</td>
<td>3.581 4.186 -0.604  4</td>
<td>2.778 4.031 -1.252  3</td>
</tr>
<tr>
<td>variety of sources . . .</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. To instill in students a life-long commitment to learning</td>
<td>2.730 4.307 -0.856  3</td>
<td>3.290 4.139 -0.848  3</td>
<td>3.077 3.677 -0.600  4</td>
</tr>
<tr>
<td>. . .</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
-1.372, and students rated it with a -1.663 discrepancy.

Table 3 reports findings on the four goal statements in the area of "Individual Personal Development." It is clearly evident from the data in the table that all three rating groups reported a discrepancy. Each of the respondent groups unanimously reported top priority on "to help students be open, honest, and trusting in their relationship with others." The senate rated its discrepancy with -2.423, faculty rated it with -2.465, and students rated it with -1.849.

The data in table 4 indicate that all three respondent groups perceived a discrepancy in the four goal statements in the area of "Humanism/Altruism." The table shows that all three rating groups agreed that "to encourage students to become conscious of the important moral issues of our time" was in great need of improvement. The senate rated its discrepancy between "Is" and "Should Be" with a -2.692. Faculty rated it with -2.651, and students rated it with a discrepancy of -2.200.

From the data in table 5 it is again clear that the three rating groups felt that there was a discrepancy in all four goal statements in the area of "Cultural/Aesthetic Awareness." The table indicates that "to require students to complete some course in humanities" was the first-ranking need priority for the senate. It was rated with a discrepancy of -.730. "To acquaint students with forms of literary expression in western and non-western countries" was the highest need priority for both faculty and students. Faculty rated it with a discrepancy of -.569, whereas students rated it with a discrepancy of -.533.

The data in table 6 show that all three respondent groups
<table>
<thead>
<tr>
<th>Item</th>
<th>Senate ISX</th>
<th>SBX</th>
<th>Disc</th>
<th>Rank</th>
<th>Faculty ISX</th>
<th>SBX</th>
<th>Disc</th>
<th>Rank</th>
<th>Students ISX</th>
<th>SBX</th>
<th>Disc</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. To help students identify their own personal goals and develop means of achieving them . . .</td>
<td>2.384</td>
<td>4.230</td>
<td>-1.846</td>
<td>4</td>
<td>2.604</td>
<td>3.825</td>
<td>-1.220</td>
<td>4</td>
<td>1.964</td>
<td>3.445</td>
<td>-1.480</td>
<td>4</td>
</tr>
<tr>
<td>8. To help students develop a sense of self-worth, self-confidence, and a capacity to have an impact on events . . .</td>
<td>2.269</td>
<td>4.307</td>
<td>-2.038</td>
<td>2</td>
<td>2.872</td>
<td>4.139</td>
<td>-1.267</td>
<td>3</td>
<td>2.252</td>
<td>3.761</td>
<td>-1.508</td>
<td>3</td>
</tr>
<tr>
<td>11. To help students achieve deeper levels of self-understanding . . .</td>
<td>2.307</td>
<td>4.192</td>
<td>-1.884</td>
<td>3</td>
<td>2.000</td>
<td>3.720</td>
<td>-1.720</td>
<td>2</td>
<td>1.859</td>
<td>3.642</td>
<td>-1.782</td>
<td>2</td>
</tr>
<tr>
<td>12. To help students be open, honest, and trusting in their relationships with others . . .</td>
<td>1.846</td>
<td>4.269</td>
<td>-2.423</td>
<td>1</td>
<td>1.651</td>
<td>4.116</td>
<td>-2.465</td>
<td>1</td>
<td>1.817</td>
<td>3.666</td>
<td>-1.849</td>
<td>1</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
## Table 4

**Area Goal-Statement Means of "Is" and "Should Be," and Their Differences Among the Three Groups in "Humanism/Altruism"**

| Item | Senate | | | Faculty | | | Students | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | Is*   | SB*   | Disc  | Rank  | Is*   | SB*   | Disc  | Rank  | Is*   | SB*   | Disc  | Rank  |
| 13.  | 1.576 | 4.269  | -2.692| 1     | 1.593 | 4.244  | -2.651| 1     | 1.494 | 3.694  | -2.200| 1     |
| 15.  | 2.000 | 4.000  | -2.000| 4     | 2.313 | 4.290  | -1.976| 4     | 2.021 | 3.533  | -1.512| 4     |
| 17.  | 1.884 | 4.423  | -2.538| 2     | 1.918 | 4.209  | -2.290| 2     | 2.077 | 3.694  | -1.617| 3     |

*IS* = "Is" mean; *SB* = "Should Be" mean; Disc = Discrepancy
TABLE 5

AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "CULTURAL/AESTHETIC AWARENESS"

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISX*</td>
<td>SBX</td>
<td>Disc Rank</td>
</tr>
<tr>
<td>14. To increase students' sensitivity to and appreciation of various forms of art and artistic expression . . .</td>
<td>1.653</td>
<td>2.000</td>
<td>- .346</td>
</tr>
<tr>
<td>16. To require students to complete some course work in the humanities or arts . . .</td>
<td>1.186</td>
<td>1.593</td>
<td>- .406</td>
</tr>
<tr>
<td>18. To encourage students to express themselves artistically, e.g., in music, painting, film-making . . .</td>
<td>1.423</td>
<td>1.884</td>
<td>-4.61</td>
</tr>
<tr>
<td>20. To acquaint students with forms of literary expression in western and non-western countries . . .</td>
<td>1.961</td>
<td>2.576</td>
<td>- .615</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
### Table 6

**Area Goal-Statement Means of "Is" and "Should Be," and Their Differences Among the Three Groups in "Vocational Preparation"**

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. To provide opportunities for students to prepare for specific occupational careers . . .</td>
<td>3.538 4.153 -0.615 3</td>
<td>3.744 4.232 -0.488 4</td>
<td>3.491 3.950 -0.459 4</td>
</tr>
<tr>
<td>25. To develop educational programs geared to new and emerging career fields . . .</td>
<td>2.846 4.038 -1.192 2</td>
<td>3.360 4.162 -0.802 2</td>
<td>3.203 3.701 -0.498 3</td>
</tr>
<tr>
<td>31. To provide retraining opportunities for individuals whose job skills have become out of date . . .</td>
<td>1.692 4.346 -2.653 1</td>
<td>1.302 3.988 -2.686 1</td>
<td>1.140 3.722 -2.582 1</td>
</tr>
<tr>
<td>33. To assist students in deciding upon a vocational career . . .</td>
<td>1.884 2.460 2.346 4</td>
<td>1.139 1.779 -0.639 3</td>
<td>1.371 3.624 -2.252 2</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy*
perceived a discrepancy in all four goal statements included in the area of "Vocational Preparation." The table reports that the three rating groups unanimously gave first-ranking priority on "to assist students deciding upon a vocational career." The senate rated its discrepancy with -2.653. Faculty rated it with -2.686, and students rated it with a -2.583 discrepancy.

It is evident from the data in table 7 that discrepancies were reported by each of the three rating groups in all four goal statements in the area of "Advanced Training." The table indicates that "to conduct advanced study in specialized problem areas, e.g., through research centers" was the leading need priority. The senate rated it with -.961 discrepancy, faculty rated it with -.895, and students with -.725.

It is indicated from the data in table 8 that the three respondent groups agreed that there was a discrepancy in each of the four goal statements in the area of "Research." The table further shows that all three rating groups agree that "to conduct basic research in the social studies" was the top need priority. The senate reported it with a discrepancy of -2.192, for the faculty, its discrepancy was -1.895, whereas for students it was -1.175.

Again it is clearly evident from the data in table 9 that all three rating groups agreed that there was a discrepancy in each of the four goal statements in the areas of "Meeting Local Needs." The table also indicates that the three respondent groups unanimously reported that the top need priority in this goal area was "to provide opportunities for continuing education for adults in the local area, e.g., on a part-time basis." The senate rated its discrepancy with
### TABLE 7

**AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "ADVANCED TRAINING"**

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. To develop what would generally be regarded as a strong and comprehensive graduate school . . .</td>
<td>3.807</td>
<td>4.384 - .576 3</td>
<td>3.662</td>
</tr>
<tr>
<td>26. To prepare students in one or more of the liberal professions, e.g., law, medicine, architecture . . .</td>
<td>3.692</td>
<td>4.000 - .307 4</td>
<td>3.662</td>
</tr>
<tr>
<td>27. To offer graduate programs in such &quot;newer&quot; professions as engineering, education, and social work . . .</td>
<td>3.662</td>
<td>4.000 - .653 2</td>
<td>3.348</td>
</tr>
<tr>
<td>36. To conduct advanced study in specialized problem areas, e.g., through research centers . . .</td>
<td>3.407</td>
<td>4.423 - .961 1</td>
<td>3.069</td>
</tr>
</tbody>
</table>

*ISX* = "Is" mean; *SBX* = "Should Be" mean; Disc = Discrepancy
<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISX</td>
<td>SBX</td>
<td>Disc Rank</td>
</tr>
<tr>
<td>23. To perform research for government, business or industry . . .</td>
<td>2.923</td>
<td>4.615</td>
<td>-1.692</td>
</tr>
<tr>
<td>29. To conduct basic research in the natural sciences . . .</td>
<td>2.884</td>
<td>3.961</td>
<td>1.076</td>
</tr>
<tr>
<td>30. To conduct basic research in the social sciences . . .</td>
<td>1.884</td>
<td>4.074</td>
<td>-2.192</td>
</tr>
<tr>
<td>32. To contribute, through research, to the general advancement of knowledge . . .</td>
<td>2.538</td>
<td>4.269</td>
<td>-1.730</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
### Table 9

**Area Goal-Statement Means of "Is" and "Should Be," and Their Differences among the Three Groups in "Meeting Local Needs"**

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. To provide opportunities for continuing education for adults in the local area, e.g., on a part-time basis . . .</td>
<td>2.923 4.346 -3.000 1</td>
<td>1.500 4.232 -2.732 1</td>
<td>1.294 3.740 -2.445 1</td>
</tr>
<tr>
<td>28. To serve as a cultural center in the community served by the campus . . .</td>
<td>2.076 3.692 -1.615 3</td>
<td>2.918 3.976 -1.058 2</td>
<td>3.045 3.771 0.726 2</td>
</tr>
<tr>
<td>34. To provide skilled manpower for local-area business, industry, and government . . .</td>
<td>3.538 4.115 -0.576 4</td>
<td>3.186 4.116 -0.930 3</td>
<td>3.245 3.785 -0.540 4</td>
</tr>
<tr>
<td>35. To facilitate involvement of students in neighborhood and community-service activities . . .</td>
<td>1.307 4.038 -2.730 2</td>
<td>1.337 1.883 -0.546 4</td>
<td>1.200 1.747 -0.547 3</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
-3.000, faculty rated it with -2.732, and students rated it with -2.445.

The data in table 10 also indicate that all the three rating reporting groups perceived a discrepancy in each of the four goal statements in the area of "Public Service." The table further reveals that "to help people from communities acquire knowledge and skills they can use in improving conditions in their own communities" was the highest need priority for the senate; it was rated with a discrepancy of -3.230. For the faculty, the top need priority was placed on "to work with government agencies in designing new social environment programs;" it was rated with a discrepancy of -1.674. However, for students, "to focus resources of the institution on the solution of major social environmental problems" was the top-ranking priority. It was rated with a discrepancy of -1.157.

From the data in table 11 it is clear that all the three respondent groups felt that there was a discrepancy in all four goal statements constituting the area of "Democratic Governance." The table indicates that all three rating groups unanimously reported that "to centralize decision making to the greatest extent possible" was the top need priority. The senate rated its discrepancy with -2.192, faculty rated it with -1.709, and students rated it with -1.842.

It is evident from table 12 that the three rating groups agreed that there was a discrepancy in all four goal statements in the area of "Community." The senate placed top need priority on "to maintain a campus climate in which differences of opinion can be aired openly and amically." It was rated with a discrepancy of -2.538. Faculty and students agreed that "to maintain a climate of mutual trust and respect among students, faculty, and administrators" was the leading
TABLE 10
AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "PUBLIC SERVICE"

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate ISX*</th>
<th>SBX</th>
<th>Disc</th>
<th>Rank</th>
<th>Faculty ISX</th>
<th>SBX</th>
<th>Disc</th>
<th>Rank</th>
<th>Students ISX</th>
<th>SBX</th>
<th>Disc</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.</td>
<td>1.076</td>
<td>4.307</td>
<td>-3.230</td>
<td>1</td>
<td>1.244</td>
<td>2.151</td>
<td>-0.906</td>
<td>3</td>
<td>1.112</td>
<td>1.810</td>
<td>-0.698</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To help people from communities acquire knowledge and skills they can use in improving conditions in their own communities . . .</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>1.230</td>
<td>3.730</td>
<td>-2.500</td>
<td>2</td>
<td>2.267</td>
<td>3.941</td>
<td>-1.676</td>
<td>1</td>
<td>2.603</td>
<td>3.477</td>
<td>-0.873</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>To work with governmental agencies in designing new social environmental programs . . .</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>1.692</td>
<td>3.692</td>
<td>-2.000</td>
<td>3</td>
<td>2.372</td>
<td>3.813</td>
<td>-1.441</td>
<td>2</td>
<td>2.200</td>
<td>3.357</td>
<td>-1.157</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To focus resources of the institution on the solution of major social and environmental problems . . .</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>2.961</td>
<td>4.269</td>
<td>-1.307</td>
<td>4</td>
<td>3.616</td>
<td>4.162</td>
<td>-0.546</td>
<td>4</td>
<td>3.228</td>
<td>3.775</td>
<td>-0.547</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>To be responsive to national priorities when considering new educational programs for the institution . . .</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*ISX* = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
### TABLE II

AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "DEMOCRATIC GOVERNANCE"

| Item | Senate | | | | Faculty | | | | | | Students | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | ISX    | SBX    | Disc   | Rank   | ISX    | SBX    | Disc   | Rank   | ISX    | SBX    | Disc   | Rank   |
| 41. To create a system of campus governance that is genuinely responsive to the concerns of all people at the institution ... | 3.230 | 4.038 | -0.807 | 4 | 2.802 | 4.069 | -1.267 | 2 | 3.024 | 3.673 | -0.649 | 2 |
| 43. To develop arrangements by which students, faculty, administrators, and trustees can be significantly involved in campus governance ... | 3.461 | 4.384 | -0.923 | 3 | 3.279 | 3.941 | -0.662 | 4 | 3.087 | 3.708 | -0.621 | 3 |
| 45. To decentralize decision-making on the campus to the greatest extent possible ... | 2.538 | 4.730 | -2.192 | 1 | 2.534 | 4.244 | -1.709 | 1 | 1.828 | 3.670 | -1.843 | 1 |
| 47. To assure individuals the opportunity to participate or be represented in making any decisions that affect them ... | 2.807 | 4.730 | -2.192 | 1 | 2.534 | 4.244 | -1.709 | 1 | 1.828 | 3.670 | -1.843 | 1 |

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
TABLE 12

AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "COMMUNITY"

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISX*</td>
<td>ISX</td>
<td>ISX</td>
</tr>
<tr>
<td></td>
<td>SBX</td>
<td>SBX</td>
<td>SBX</td>
</tr>
<tr>
<td></td>
<td>Disc</td>
<td>Disc</td>
<td>Disc</td>
</tr>
<tr>
<td></td>
<td>Rank</td>
<td>Rank</td>
<td>Rank</td>
</tr>
<tr>
<td>42. To maintain a climate in which faculty commitment to the goals and well-being of the institution is as strong as commitment to professional careers . . .</td>
<td>3.153 4.384 -1.230 4</td>
<td>3.046 4.197 -1.151 3</td>
<td>2.785 3.659 -0.873 4</td>
</tr>
<tr>
<td>44. To maintain a climate in which communication throughout the organizational structure is open and candid . . .</td>
<td>3.076 4.576 -1.500 3</td>
<td>3.023 3.976 -0.953 4</td>
<td>2.417 3.621 -1.203 3</td>
</tr>
<tr>
<td>46. To maintain a campus climate in which differences of opinion can be aired openly and amicably . . .</td>
<td>2.384 4.615 -2.538 1</td>
<td>2.825 4.209 -1.383 2</td>
<td>1.856 3.628 -1.771 1</td>
</tr>
<tr>
<td>48. To maintain a climate of mutual trust and respect among students, faculty, and administrators . . .</td>
<td>2.384 4.576 -2.192 2</td>
<td>2.139 4.186 -2.046 1</td>
<td>2.070 3.603 -1.533 2</td>
</tr>
</tbody>
</table>

*ISX = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
need priority. Faculty rated it with a discrepancy of -2.046, and students rated it with -1.533.

The data in table 13 indicate that the three respondent groups reported a discrepancy in all four goal statements comprising the area of "Intellectual/Aesthetic Environment." The same table indicates that of the four goal statements, "to create an institution known widely as an intellectually exciting and stimulating place" was the leading need priority among the senate. It was rated with a discrepancy of -2.115. Faculty and students agreed that "to create a climate in which students and faculty may easily come together for formal discussion of ideas and mutual interests" was the first need priority. The faculty rated its discrepancy with -2.500, and students rated it with -2.272.

From the data in table 14 it is again evident that all three rating groups perceived that there was a discrepancy in each of the four goal statements in the area of "Innovation." The same table also indicates that all three rating groups unanimously reported that "to experiment with new approaches to individual or group research projects" was the top need priority. The senate rated it with a discrepancy of -2.192, faculty rated it with -2.697, and students rated it with -2.233.

The preceding data indicate that all three respondent groups—senate, faculty, and students—perceived a need for improvement in each of the four goal statements comprising each of the fourteen goal areas. It is clearly evident that all three rating groups agreed on the leading need priority goal statements in eight goal areas: Individual Personal Development, Human/Altruism, Vocational Preparation, Advanced Training, Research, Meeting Local Needs, Democratic
### TABLE 13

**AREA GOAL-STATEMENT MEANS OF "IS" AND "SHOULD BE," AND THEIR DIFFERENCES AMONG THE THREE GROUPS IN "INTELLECTUAL/AESTHETIC ENVIRONMENT"

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>49. To create a campus climate in which students spend much of their free time in intellectual and cultural activities...</em></td>
<td>2.884</td>
<td>3.923</td>
<td>-1.038</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>SB</td>
<td>Disc</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2.872</td>
<td>3.848</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3.045</td>
<td>3.505</td>
</tr>
<tr>
<td>51. To create a climate in which students and faculty may easily come together for informal discussion of ideas and mutual interests...</td>
<td>2.000</td>
<td>4.153</td>
<td>-2.076</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>SB</td>
<td>Disc</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.755</td>
<td>4.255</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1.389</td>
<td>3.663</td>
</tr>
<tr>
<td>53. To sponsor each year a rich program of cultural events, lectures, concerts, art exhibits and the like...</td>
<td>2.307</td>
<td>3.155</td>
<td>-1.384</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>SB</td>
<td>Disc</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2.662</td>
<td>3.186</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2.796</td>
<td>3.326</td>
</tr>
<tr>
<td>55. To create an institution known widely as an intellectually exciting and stimulating place...</td>
<td>2.384</td>
<td>4.500</td>
<td>-2.115</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>SB</td>
<td>Disc</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2.941</td>
<td>3.846</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.038</td>
<td>3.635</td>
</tr>
</tbody>
</table>

*IS* = "Is" mean; SB = "Should Be" mean; Disc = Discrepancy
### Table 14

**Area Goal-Statement Means of "Is" and "Should Be," and Their Differences among the Three Groups in "Innovation"**

<table>
<thead>
<tr>
<th>Item</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISX*</td>
<td>SBX</td>
<td>Disc</td>
</tr>
<tr>
<td>50. To build a climate on the campus in which continuous educational innovation is accepted as an institutional way of life . . .</td>
<td>2.307</td>
<td>4.115</td>
<td>-1.807</td>
</tr>
<tr>
<td>52. To experiment with different methods of evaluating and grading student performance . . .</td>
<td>1.769</td>
<td>2.692</td>
<td>-0.923</td>
</tr>
<tr>
<td>54. To experiment with new approaches to individualized instruction: presentation of individual or group research projects . . .</td>
<td>1.423</td>
<td>3.615</td>
<td>-2.192</td>
</tr>
<tr>
<td>56. To create procedures by which curricular or instructional innovations may be readily initiated . . .</td>
<td>2.192</td>
<td>4.192</td>
<td>-2.000</td>
</tr>
</tbody>
</table>

*ISX* = "Is" mean; SBX = "Should Be" mean; Disc = Discrepancy
Governance, and Innovation. A conclusion is made, therefore, that the three rating groups share common concern for a need for improvement in the institution.

**Ranking Order of the Fourteen Goal Areas**

The ranking order of the fourteen goal areas was based on the discrepancy between the means of "Is" and "Should Be" for each given goal area. The higher the discrepancy, the more need priority is attached to it.

Table 15 presents the ranking order of the fourteen goal areas as perceived by the senate. The table indicates that the four goal areas with the highest discrepancy were the following, in order of priority: (1) "Humanism/Altruism" was reported as the first-ranking need priority, with a discrepancy of -2.365; (2) "Public Service" ranked second, with a discrepancy of -2.259; (3) "Individual Personal Development" ranked third, with a discrepancy of -2.048; and (4) "Meeting Local Needs" ranked fourth, with a discrepancy of -1.980.

Table 16 shows the ranking order of the fourteen goal areas as perceived by the faculty. The four highest ranking priority goal areas as indicated in the table were the following: (1) "Humanism/Altruism" topped the list in need priority, rated with a discrepancy of -2.238 between the means of "Is" and "Should Be"; (2) "Individual Personal Development" ranked second, with a discrepancy of -1.668; (3) "Research" was reported third, with a discrepancy of -1.482; and (4) "Community" ranked fourth, with a discrepancy of -1.383.

Table 17 presents the ranking order of the fourteen goal areas as perceived by students. The first four ranking goal areas reported were as follows: (1) "Humanism/Altruism" was reported as the top...
<table>
<thead>
<tr>
<th>Goal Area</th>
<th>ISX</th>
<th>SD</th>
<th>SBX</th>
<th>SD</th>
<th>Diff</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Academic development</td>
<td>3.221</td>
<td>.302</td>
<td>3.875</td>
<td>.310</td>
<td>-0.653</td>
<td>12</td>
</tr>
<tr>
<td>2. Intellectual orientation</td>
<td>2.836</td>
<td>.367</td>
<td>4.076</td>
<td>.271</td>
<td>-1.240</td>
<td>10</td>
</tr>
<tr>
<td>3. Individual personal development</td>
<td>2.201</td>
<td>.274</td>
<td>4.250</td>
<td>.291</td>
<td>-2.048</td>
<td>3</td>
</tr>
<tr>
<td>5. Cultural/aesthetic awareness</td>
<td>1.586</td>
<td>.244</td>
<td>2.125</td>
<td>.362</td>
<td>-0.538</td>
<td>14</td>
</tr>
<tr>
<td>7. Advanced training</td>
<td>3.576</td>
<td>.365</td>
<td>4.201</td>
<td>.212</td>
<td>-0.625</td>
<td>13</td>
</tr>
<tr>
<td>9. Meeting local needs</td>
<td>2.067</td>
<td>.250</td>
<td>4.048</td>
<td></td>
<td>-1.980</td>
<td>4</td>
</tr>
<tr>
<td>10. Public service</td>
<td>1.740</td>
<td>.239</td>
<td>4.000</td>
<td>.666</td>
<td>-2.259</td>
<td>2</td>
</tr>
<tr>
<td>11. Democratic governance</td>
<td>3.009</td>
<td>.343</td>
<td>4.413</td>
<td>.603</td>
<td>-1.403</td>
<td>9</td>
</tr>
<tr>
<td>12. Community</td>
<td>2.673</td>
<td>.306</td>
<td>4.538</td>
<td>.313</td>
<td>-1.865</td>
<td>5</td>
</tr>
<tr>
<td>13. Intellectual/aesthetic environment</td>
<td>2.394</td>
<td>.368</td>
<td>3.913</td>
<td>.664</td>
<td>-1.519</td>
<td>8</td>
</tr>
<tr>
<td>Goal Area</td>
<td>ISX</td>
<td>SD</td>
<td>SBX</td>
<td>SD</td>
<td>Diff</td>
<td>Rank</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>1. Academic development</td>
<td>3.066</td>
<td>.302</td>
<td>3.575</td>
<td>.279</td>
<td>-0.508</td>
<td>14</td>
</tr>
<tr>
<td>2. Intellectual orientation</td>
<td>3.029</td>
<td>.282</td>
<td>4.061</td>
<td>.318</td>
<td>-1.032</td>
<td>11</td>
</tr>
<tr>
<td>3. Individual personal development</td>
<td>2.281</td>
<td>.324</td>
<td>3.950</td>
<td>.371</td>
<td>-1.668</td>
<td>2</td>
</tr>
<tr>
<td>5. Cultural/aesthetic awareness</td>
<td>1.412</td>
<td>.238</td>
<td>1.930</td>
<td>.322</td>
<td>-0.517</td>
<td>13</td>
</tr>
<tr>
<td>7. Advanced training</td>
<td>3.436</td>
<td>.343</td>
<td>4.116</td>
<td>.331</td>
<td>-0.680</td>
<td>12</td>
</tr>
<tr>
<td>8. Research</td>
<td>2.558</td>
<td>.296</td>
<td>4.040</td>
<td>.371</td>
<td>-1.482</td>
<td>3</td>
</tr>
<tr>
<td>9. Meeting local needs</td>
<td>2.235</td>
<td>.323</td>
<td>3.552</td>
<td>.323</td>
<td>-1.316</td>
<td>6</td>
</tr>
<tr>
<td>10. Public service</td>
<td>2.375</td>
<td>.327</td>
<td>3.517</td>
<td>.417</td>
<td>-1.142</td>
<td>10</td>
</tr>
<tr>
<td>12. Community</td>
<td>2.758</td>
<td>.330</td>
<td>4.142</td>
<td>.446</td>
<td>-1.383</td>
<td>4</td>
</tr>
<tr>
<td>13. Intellectual/aesthetic environment</td>
<td>2.558</td>
<td>.301</td>
<td>3.784</td>
<td>.328</td>
<td>-1.226</td>
<td>7</td>
</tr>
</tbody>
</table>
## Table 17

**Means for "IS" and "Should Be," Standard Deviations, Differences between Means, and Rank Order for the Fourteen Goal Areas as Perceived by the Students**

<table>
<thead>
<tr>
<th>Goal Area</th>
<th>ISX</th>
<th>SD</th>
<th>SBX</th>
<th>SD</th>
<th>Diff</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Academic development</td>
<td>2.900</td>
<td>.259</td>
<td>3.419</td>
<td>.251</td>
<td>-0.518</td>
<td>13</td>
</tr>
<tr>
<td>2. Intellectual orientation</td>
<td>2.524</td>
<td>.255</td>
<td>3.756</td>
<td>.269</td>
<td>-1.231</td>
<td>5</td>
</tr>
<tr>
<td>3. Individual personal development</td>
<td>1.973</td>
<td>.335</td>
<td>3.628</td>
<td>.302</td>
<td>-1.655</td>
<td>2</td>
</tr>
<tr>
<td>4. Humanism/altruism</td>
<td>1.872</td>
<td>.281</td>
<td>3.660</td>
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need priority, with a discrepancy of -1.787; (2) "Individual Develop­ment" was rated second, with a discrepancy of -1.655; (3) "Vocational Preparation" was reported third, with a discrepancy of -1.448; and (4) "Community" was ranked fourth, with a discrepancy of -1.345.

From the foregoing findings, it was clearly observed that all three rating groups unanimously indicated that "Humanism/Altruism" was the leading need priority goal area in the institution. There was also a consensus that "Individual Personal Development" was one of the first four need priority goal areas.

**Spearman Rank Correlation Coefficient**

The Spearman rank correlation coefficient was calculated to find the degree of relationship of the priority ranking of the fourteen goal areas between senate and faculty, senate and students, and faculty and students. Table 18 indicates that there is a high positive correlation between the ranking order of senate and faculty (.78), and between the ranking order reported by faculty and students (.72). It shows that the correlation between the ranking order given by the senate and students is moderate (.58). A conclusion is drawn that, in
general, the three rating groups were similar in ordering how they perceived the need priority of the fourteen goal areas.

Hypotheses Testing

To guide the analysis of data, five specific hypotheses in the null form were developed. This section of the chapter presents the results of testing these hypotheses.

t-test Analysis of Significance

Hypotheses 1 to 3 were tested using the t-test analysis for correlated samples. The results of each test are reported below.

Hypothesis 1: There is no significant difference between "Is" and "Should Be" goal areas of the National University of Rwanda as perceived by senate members. This hypothesis related to fourteen separate goal areas; hence, required fourteen sub-hypotheses, a to n. Each of these sub-hypotheses was tested separately using the t-test for the means of correlated samples.

Table 19 presents the results of the t-tests for all fourteen sub-hypotheses. For each sub-test, there is a significant difference between "Is" and "Should Be" goal areas. In each case, the mean of "Should Be" was significantly above that of "Is." Thus, the evidence justified the rejection of the hypothesis with all its sub-hypotheses, a to n.

Hypothesis 2: There is no significant difference between "Is" and "Should Be" goal areas of the National University of Rwanda as perceived by faculty members. This hypothesis was tested for each of the fourteen goal areas, thus requiring fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1. Each of these
**TABLE 19**

**TEST OF SIGNIFICANCE BETWEEN THE MEANS FOR "IS" AND "SHOULD BE" OF THE FOURTEEN GOAL AREAS AS PERCEIVED BY SENATE MEMBERS**

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* IS = "Is"
SB = "Should Be"
sub-hypotheses was tested using the simple t-test for correlations of samples.

Table 20 shows the results of the sub-tests for all fourteen sub-hypotheses. For each sub-hypothesis there is a significant difference between "Is" and "Should Be" goal areas of the National University of Rwanda as perceived by faculty members. In each case, the mean of "Should Be" was significantly above that of "Is." Thus the null hypothesis, with all its sub-hypotheses of no significant difference between "Is" and "Should Be" goal areas, a to n, was rejected.

**Hypothesis 3:** There is no significant difference between "Is" and "Should Be" goal areas of the National University of Rwanda as perceived by students. This hypothesis was tested for each of the fourteen separate goal areas; therefore, it required fourteen sub-hypotheses, a to n, corresponding to those under hypothesis 1.

Table 21 indicates the results of the sub-hypotheses. For each sub-test, there is a significant difference between "Is" and "Should Be" goal areas of the National University of Rwanda as perceived by students. In each case, the mean of "Should Be" was significantly above that of "Is." This suggests rejection of the hypothesis and all its sub-hypotheses, a to n.

The preceding findings indicate that there is a significant difference between the means of "Is" and "Should Be" in the fourteen goal areas. This suggests that there is a need for improvement at the National University of Rwanda in the goal areas covered in this study.
TABLE 20
TEST OF SIGNIFICANCE BETWEEN THE MEANS FOR "IS" AND "SHOULD BE"
OF THE FOURTEEN GOAL AREAS AS PERCEIVED BY FACULTY

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* IS = "I's"
SB = "Should Be"
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<td>SB</td>
<td>3.261</td>
<td>0.299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Public service</td>
<td>285</td>
<td>IS</td>
<td>2.285</td>
<td>0.256</td>
<td>-43.05</td>
<td>284</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SB</td>
<td>3.105</td>
<td>0.288</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Democratic governance</td>
<td>285</td>
<td>IS</td>
<td>2.789</td>
<td>0.254</td>
<td>-48.87</td>
<td>284</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SB</td>
<td>3.692</td>
<td>0.293</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Area</td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>t</td>
<td>df</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SB</td>
<td>3.628</td>
<td>.284</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Intellectual/aesthetic environment</td>
<td>285</td>
<td>IS</td>
<td>2.567</td>
<td>.266</td>
<td>-55.86</td>
<td>284</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SB</td>
<td>3.532</td>
<td>.275</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SB</td>
<td>3.103</td>
<td>.265</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* IS = "I S"
SB = "Should Be"
One-way Analysis of Variance

Hypotheses 4 and 5 were tested using one-way analysis of variance. Each of the two hypotheses was comprised of fourteen sub-hypotheses, a to n, corresponding to the fourteen goal areas. The results of each test are reported below.

**Hypothesis 4:** There is no significant difference among the responses of the senate, faculty, and students of the National University of Rwanda with respect to the "Is" goals of the University. This hypothesis was comprised of the corresponding fourteen sub-hypotheses, a to n, relating to the fourteen goal areas.

**Hypothesis 4a:** There is no significant difference among the responses of the senate, faculty, and students with respect to the "Is" goals in the "Academic Development" goal area of the National University of Rwanda.

Table 22 gives the analysis of variance which yields a significant F-ratio. This indicates that there is a significant difference among

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>002</td>
<td>3.749</td>
<td>1.874</td>
<td>25.26*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>29.231</td>
<td>.074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>32.980</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level
the responses of the three responding groups. The null sub-hypothesis is, therefore, rejected.

To study the significant differences between all pairs of means for hypotheses 4 and 5, the Scheffé a-posteriori test was used.

Table 23 shows the contrasts of means and the Scheffé a-posteriori test of significance for sub-hypothesis 4a. The upper portion of the table shows the means of the three groups. The lower indicates contrasts. In each case, $X_i - X_j$ gives the difference between means for contrasts as stated. It is evident that data from the table reveal that all differences are significant.

**Sub-hypothesis 4b**: There is no significant difference among the responses of the academic senate members, faculty, and students with respect to the "Is" goals of the National University of Rwanda in "Intellectual Orientation." Table 24 presents the analysis of variance
which yields a significant F-ratio. This suggests that there is a significant difference among the responses of the three respondent groups. This justifies rejection of the null hypothesis.

**TABLE 24**

**ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "INTELLECTUAL ORIENTATION" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>17.738</td>
<td>8.869</td>
<td>121.557*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>28.748</td>
<td>.073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>46.486</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the significance of differences between all possible pairs of means for sub-hypothesis 4b, the Scheffé a-posteriori test was used. Table 25 shows the contrasts between means with critical values in the right-hand column. The table reveals that all differences are statistically significant.

Sub-hypothesis 4c: The one-way analysis of variance was used to test the sub-hypothesis that there is no significant difference between the responses of the senate members, faculty, and students with respect to the "Is" (actual goals of the University of Rwanda) in "Individual Personal Development." From table 26 it is clear that there is a significant difference among the perceptions of the three groups in relation to "Individual Personal Development" goals. The table shows the analysis of variance, which yields a significant F-ratio.
### Table 25

**Contrasts of Means and Scheffe's A-Posteriori Test of Significance for Hypothesis 4b**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>( \bar{X}_i - \bar{X}_j )</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>0.193</td>
<td>0.130*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>0.312</td>
<td>0.119*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>0.505</td>
<td>0.720*</td>
</tr>
</tbody>
</table>

*significant at .10 level

### Table 26

**One-Way Analysis of Variance for "IS" in "Individual Personal Development" Goals Among Senate, Faculty, and Students**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>6.876</td>
<td>3.438</td>
<td>31.667*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>42.779</td>
<td>0.108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>49.656</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

and which justifies the rejection of the null hypothesis.

To test the differences between all possible pairs of means for sub-hypothesis 4c, a Scheffe a-posteriori test was performed. Table 27 indicates the contrasts between means. The table also shows that...
TABLE 27

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR HYPOTHESIS 4c

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.080</td>
<td>.159</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.228</td>
<td>.145*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.308</td>
<td>.870*</td>
</tr>
</tbody>
</table>

*significant at .10 level

of all the pairs of mean differences, that between senate-faculty is not statistically significant.

Sub-hypothesis 4d: There is no significant difference among the responses of the senate members, faculty, and students with respect to the "Is" goals of the National University of Rwanda in "Humanism/Altruism." Table 28 reveals the analysis of variance, which yields a significant F-ratio. Again, this indicates a significant difference among the perceptions of the three respondent groups. Thus, the sub-hypothesis is rejected.

To test the differences between all possible pairs of means for sub-hypothesis 4d, the Scheffé a-posteriori test was used. Table 29 gives the contrasts between means. The data in the table reveal that all the differences between pairs of means are not statistically significant.
TABLE 28

ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "HUMANISM/ALTRUISM" GOALS AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>1.487</td>
<td>0.743</td>
<td>8.465*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>34.606</td>
<td>0.088</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>36.093</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

TABLE 29

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR HYPOTHESIS 4d

<table>
<thead>
<tr>
<th></th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>1.951</td>
<td>2.020</td>
<td>1.872</td>
</tr>
</tbody>
</table>

Pairs | $\bar{x}_i - \bar{x}_j$ | Critical Value |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.069</td>
<td>.143</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.079</td>
<td>.131</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.148</td>
<td>.790</td>
</tr>
</tbody>
</table>

*significant at .10 level

Sub-hypothesis 4e: There is no significant difference among the responses of the senate members, faculty, and students with respect to the "Is" goals of the National University of Rwanda in "Cultural/Aesthetic Awareness." Table 30 reports the analysis of variance, which yields a significant F-ratio. This shows that there is a significant
difference among the perceptions of the respondents, thus justifying
the rejection of the null hypothesis.

TABLE 30

ONE-WAY ANALYSIS OF VARIANCE FOR "IS"
IN "CULTURAL/AESTHETIC AWARENESS" GOALS
AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>0.851</td>
<td>0.425</td>
<td>6.527*</td>
<td>.0016</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>25.691</td>
<td>0.065</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>26.543</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for
sub-hypothesis 4e, the Scheffe a-posteriori test was used. Table 31
shows the contrasts between means. It is revealed in the table that
of all the differences, only that of senate-students is not statistically
significant.

Sub-hypothesis 4f: There is no significant difference among
the perceptions of the senate members, faculty, and students with
respect to the "Is" of the National University of Rwanda in the "Voca-
tional Preparation" goal area. Table 32 presents the analysis of
variance, which yields a significant F-ratio. This clearly indicates
that there is a significant difference among the perceptions of the
three respondent groups. Therefore, the null hypothesis is rejected.

To test the differences between all possible pairs of means for
sub-hypothesis 4f, the Scheffé a-posteriori test was performed. Table
33 provides the contrasts between means. The significant differences
### TABLE 31

**CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR HYPOTHESIS 4e**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_1 - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.174</td>
<td>.123*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.078</td>
<td>.112</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.093</td>
<td>.068*</td>
</tr>
</tbody>
</table>

*significant at .10 level

### TABLE 32

**ONE-WAY ANALYSIS OF VARIANCE FOR "IS* IN "VOCATIONAL PREPARATION* GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>1.169</td>
<td>0.584</td>
<td>8.432*</td>
<td>&lt; .0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>27.316</td>
<td>0.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>28.485</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level
are marked with an asterisk. The table reveals that only the difference between the means of senate and faculty is not statistically significant.

TABLE 33

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4f

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.104</td>
<td>.127</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.189</td>
<td>.116*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.085</td>
<td>.070*</td>
</tr>
</tbody>
</table>

*significant at .10 level

Sub-hypothesis 4g: There is no significant difference among the perceptions of the senate, faculty, and students with regard to the "Is" goals of the National University of Rwanda in the "Advanced Training" goal area. Data in table 34 give the analysis of variance, which yields a significant F-ratio. This shows that there is a significant difference among the responses of the three respondent groups, thus justifying the rejection of the hypothesis.

To test the difference between all possible pairs of means for sub-hypothesis 4g, the Scheffé a-posteriori test was used. Table 35 gives the contrasts between means. The data in the table indicate that of all the differences only senate-faculty is not significant.

Sub-hypothesis 4h: There is no significant difference among the perceptions of the senate members, faculty members, and students
TABLE 34
ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN 'ADVANCED TRAINING' GOALS AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>3.455</td>
<td>1.727</td>
<td>20.011*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>34.022</td>
<td>0.086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>37.478</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

TABLE 35
CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4g

<table>
<thead>
<tr>
<th>Pairs</th>
<th>X_i - X_j</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.140</td>
<td>.142</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.303</td>
<td>.130*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.163</td>
<td>.078*</td>
</tr>
</tbody>
</table>

*significant at .10 level

with respect to the "Is" of the National University of Rwanda in the "Research" goal area. From table 36 it is clear that there is a significant difference among the perceptions of the three respondent groups. This is revealed by the data which show the analysis of
variance yielding a significant F-ratio. Therefore, the null hypothesis is rejected.

TABLE 36

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>6.289</td>
<td>3.144</td>
<td>46.659*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>26.554</td>
<td>0.067</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>32.844</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for sub-hypothesis 4h, the Scheffé a-posteriori test was used. Table 37 indicates the contrasts between means. Data in the table indicate that only the difference between the means of senate and faculty is not statistically significant.

Sub-hypothesis 4i: There is no significant difference among the perceptions of the senate members, faculty members, and students in regard to the "Is" goals of the National University of Rwanda in the areas of "Meeting Local Needs." Table 38 presents the analysis of variance, which yields a significant F-ratio. This indicates a significant difference among the perceptions of the three respondent groups, thus justifying the rejection of the null hypothesis.

To test the differences between all possible pairs of means for sub-hypothesis 4i, the Scheffé a-posteriori test was used. Table 39

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TABLE 37

CONTRAST OF MEANS AND SCHEFFE'S A-PERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4h

<table>
<thead>
<tr>
<th></th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>2.557</td>
<td>2.558</td>
<td>2.837</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.001</td>
<td>.125</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.280</td>
<td>.115*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.279</td>
<td>.069*</td>
</tr>
</tbody>
</table>

*significant at .10 level

TABLE 38

ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "MEETING LOCAL NEEDS GOALS AMONG SENATE, FACULTY, AND STUDENTS"

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>0.564</td>
<td>0.282</td>
<td>4.241*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>26.235</td>
<td>0.067</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>26.800</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

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reports the contrasts between means. The table shows that the differences among all pairs are significant.

TABLE 39
CONTRASTS OF MEANS AND SCHEFFE’S A-PERSONORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4i

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_1 - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.496</td>
<td>.146*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.787</td>
<td>.134*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.291</td>
<td>.080*</td>
</tr>
</tbody>
</table>

*significant at .10 level

Sub-hypothesis 4j: There is no significant difference among the perceptions of the senate members, faculty, and students with respect to the "Is" goals of the National University of Rwanda in the "Public Service" goal area. Table 40 reports the analysis of variance, which yields a significant F-ratio. This clearly suggests rejection of the null hypothesis.

To test the differences between all possible pairs of means for sub-hypothesis 4j, the Scheffé a-posteriori test was performed. The data in table 41 indicate the contrasts between means. It is clearly indicated that all the differences are significant.

Sub-hypothesis 4k: There is no significant difference among the perceptions of the senate, faculty, and students in regard to the "Is" goals of the National University of Rwanda in the area of
TABLE 40

ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "PUBLIC SERVICE" GOALS AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>8.813</td>
<td>4.156</td>
<td>56.042*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>29.222</td>
<td>0.074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>37.536</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

TABLE 41

CONTRASTS OF MEANS AND SCHEFFE'S A-POTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4j

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.483</td>
<td>.157*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.895</td>
<td>.143*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.412</td>
<td>.086*</td>
</tr>
</tbody>
</table>

*significant at .10 level

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"Democratic Governance." Table 42 provides the analysis of variance, which yields a significant F-ratio. This indicates that there is a significant difference in the perceptions of the three respondent groups. Therefore, the null hypothesis is rejected.

**TABLE 42**

**ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "DEMOCRATIC GOVERNANCE" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>1.670</td>
<td>0.835</td>
<td>10.791*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>30.486</td>
<td>0.077</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>32.156</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for sub-hypothesis 4k, the Scheffé a-posteriori test was used. The data in table 43 provide the contrasts between means. The analysis in the table indicates that the differences among all three pairs of means are significant.

Sub-hypothesis 41: There is no significant difference among the perceptions of the senate members, faculty, and students with respect to the "Is" goals of the National University of Rwanda in the area of "Community." Table 44 reports the analysis of variance, which yields a significant F-ratio. This indicates that there is a significant difference among the perceptions of the three respondent groups. Therefore, the null hypothesis is rejected.

To test the difference between all possible pairs of means for
### TABLE 43

**CONTRACTIONS OF MEANS AND SCHEFFE'S A-PERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4k**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{x}_i - \bar{x}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.338</td>
<td>.147*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.721</td>
<td>.135*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.383</td>
<td>.081*</td>
</tr>
</tbody>
</table>

*significant at .10 level

### TABLE 44

**ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "COMMUNITY" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>16.893</td>
<td>8.446</td>
<td>92.024*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>36.568</td>
<td>0.0917</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>53.057</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

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sub-hypothesis 41, the Scheffé a-posteriori test was used. Table 45 shows the contrasts between means. Of the three possible pairs of mean differences, only the senate-faculty difference is not statistically significant.

**TABLE 45**

**CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 41**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>( \bar{x}_i - \bar{x}_j )</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.085</td>
<td>.146</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.391</td>
<td>.136*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.476</td>
<td>.081*</td>
</tr>
</tbody>
</table>

*significant at .10 level

**Sub-hypothesis 4m:** There is no significant difference among the perceptions of the senate members, faculty, and students with regard to the "Is" goals of the National University of Rwanda in the area of "Intellectual/Aesthetic Environment." The analysis of variance, yielding a significant F-ratio as given in table 46, indicates that there is a significant difference among the perceptions of the three respondent groups, consequently the null hypothesis is rejected.

To test the differences between all possible pairs of means for sub-hypothesis 4m, the Scheffé a-posteriori test was utilized. Table 47 indicates the contrasts between means. Of the three possible pairs...
TABLE 46

ONe-WAY ANALYSIS OF VARIANCE FOR "IS"
IN "INTELLECTUAL/AESTHETIC ENVIRONMENT" GOALS
AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>.717</td>
<td>0.358</td>
<td>4.523*</td>
<td>.0114</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>31.243</td>
<td>0.079</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>31.960</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

TABLE 47

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI
TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4m

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.164</td>
<td>.136*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.173</td>
<td>.124*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.009</td>
<td>.075</td>
</tr>
</tbody>
</table>

*significant at .10 level

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of mean differences, only that of faculty-students is not statistically significant.

Sub-hypothesis 4n: There is no significant difference among the perceptions of the senate members, faculty, and students with respect to the "Is" goals of the National University of Rwanda in the area of "Innovation." Again the analysis of variance, which yields a significant F-ratio as reported in table 48, clearly indicates that there is a significant difference between the perceptions of the three respondent groups. Therefore, the null hypothesis is rejected.

**TABLE 48**

**ONE-WAY ANALYSIS OF VARIANCE FOR "IS" IN "INNOVATION" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>4.357</td>
<td>2.178</td>
<td>29.028*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>29.574</td>
<td>0.750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>33.931</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for sub-hypothesis 4n, the Scheffe a-posteriori test was used. Table 49 shows the contrasts between means. The table indicates that the differences between all pairs of means are significant.

Sub-hypothesis 5: There is no significant difference among the responses of the senate members, faculty, and students of the National University of Rwanda with respect to the "Should Be" (Ideal) goals of the University. This hypothesis is comprised of the
TABLE 49

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 4n

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{x}_i - \bar{x}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.370</td>
<td>.132*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.142</td>
<td>.121*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.228</td>
<td>.073*</td>
</tr>
</tbody>
</table>

*significant at .10 level

corresponding fourteen sub-hypotheses, a to n, which relate to the fourteen goal areas. To test this hypothesis with all fourteen sub-hypotheses, a to n, one-way analysis of variance was used.

Sub-hypothesis 5a: There is no significant difference among the responses of the senate members, faculty, and students with respect to the "Should Be" goals of the National University of Rwanda in the area of "Academic Development." Table 50 gives the analysis of variance, which yields a significant F-ratio. This clearly indicates that there is a significant difference among the perceptions of the three respondent groups.

To test the differences between all possible pairs of means for sub-hypothesis 5a, the Scheffé a-posteriori test was performed. The data in table 51 provide the contrasts between means. As indicated in the table, all differences are significant.
### Table 50

**One-Way Analysis of Variance for "Should Be" in "Academic Development" Goals Among Senate, Faculty, and Students**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>5.888</td>
<td>2.944</td>
<td>43.068*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>26.933</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>32.822</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

### Table 51

**Contrasts of Means and Scheffé's A-Posteriori Test of Significance for Sub-Hypothesis 5a**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.300</td>
<td>.126*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.456</td>
<td>.115*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.156</td>
<td>.069*</td>
</tr>
</tbody>
</table>

*significant at .10 level

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Sub-hypothesis 5b: There is no significant difference among the responses of the senate members, faculty, and students of the National University of Rwanda with regard to the "Should Be" goal of the University in the area of "Intellectual Orientation." The analysis of variance reported in table 52 indicates a significant F-ratio. It shows that there is a significant difference among the perceptions of the three respondent groups. Therefore, rejection of the null hypothesis is clearly justified.

**TABLE 52**

**ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "INTELLECTUAL ORIENTATION" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>7.662</td>
<td>3.831</td>
<td>48.475*</td>
<td>&lt;0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>31.139</td>
<td>0.079</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>38.802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for sub-hypothesis 5b, the Scheffe a-posteriori test was performed. Data in table 53 present the contrasts of means. It is indicated in the table that, of the three pair differences, only senate-faculty is not statistically significant.

Sub-hypothesis 5c: There is no significant difference among the responses of the senate members, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Individual Personal Development."
Table 54 shows the analysis of variance, which provides a significant F-ratio. This indicates that there is a significant difference among the perceptions of the three respondent groups. Thus, the null hypothesis is rejected.

To test the differences between all possible pairs of means for sub-hypothesis 5c, the Scheffé a-posteriori test was used. Table 55 provides the contrast among means. The table reports that all the differences are significant.

Sub-hypothesis 5d: There is no significant difference among the responses of the senate members, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Humanism/Altruism." Table 56 reveals the analysis of variance, which yields a significant F-ratio. This indicates that there is a significant difference among the perceptions
TABLE 54
ONE-WAY ANALYSIS OF VARIANCE FOR 'SHOULD BE' IN 'INDIVIDUAL PERSONAL DEVELOPMENT' GOALS AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>14.090</td>
<td>7.045</td>
<td>69.741*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>39.801</td>
<td>0.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>53.891</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

TABLE 55
CONTRASTS OF MEANS AND SCHEFFE'S A-PÓSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5c

<table>
<thead>
<tr>
<th></th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>4.250</td>
<td>3.950</td>
<td>3.628</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{x}_i - \bar{x}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.300</td>
<td>.154*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.622</td>
<td>.141*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.322</td>
<td>.085*</td>
</tr>
</tbody>
</table>

*significant at .10 level

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TABLE 56

ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE"
IN "HUMANISM/ALTRUISM" GOALS AMONG
SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>30.163</td>
<td>15.081</td>
<td>125.510*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>47.344</td>
<td>0.120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>77.507</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

of the respondent groups. The null hypothesis, therefore, is rejected.

To test the differences between all possible pairs of means for sub-hypothesis 5d, the Scheffé a-posteriori test was performed. The contrast of means are indicated in table 57. The table reveals that, of the three mean differences, only the senate-faculty difference is not statistically significant.

Sub-hypothesis 5e: There is no significant difference among the responses of the senate members, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Cultural/Aesthetic Awareness."

Table 58 gives the analysis of variance, which yields a significant F-ratio. This reveals that there is a significant difference among the responses of the three respondent groups. Rejection of the null hypothesis, therefore, is justified.

To test the differences between all possible pairs of means for sub-hypothesis 5e, the Scheffé a-posteriori test was used. Table 59 gives the contrasts between means. As indicated in the table, of the
### TABLE 57
**CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5d**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>( \bar{X}_i - \bar{X}_j )</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.059</td>
<td>.167</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.657</td>
<td>.157*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.598</td>
<td>.092*</td>
</tr>
</tbody>
</table>

*significant at .10 level

### TABLE 58
**ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "CULTURAL/AESTHETIC AWARENESS" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>0.767</td>
<td>0.382</td>
<td>4.313*</td>
<td>.0014</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>35.056</td>
<td>0.089</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>35.824</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level
TABLE 59

CONTRASTS OF MEANS AND SCHEFFE’S A-PÓSTERIORI
TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5e

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.195</td>
<td>.144*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.161</td>
<td>.039*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.034</td>
<td>.079</td>
</tr>
</tbody>
</table>

*significant at .10 level

three pairs of mean differences, only the faculty-students difference is not statistically significant.

Sub-hypothesis 5f: There is no significant difference among the responses of the academic senate members, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Vocational Preparation." As reported in table 60, the analysis of variance yielded a significant F-ratio, indicating that there is a significant difference among the perceptions of the three respondent groups. Thus, the null hypothesis is rejected.

To test the differences between all possible pairs of means for the sub-hypothesis 5f, the Scheffé a-posteriori test was used. Table 61 presents the contrasts among means. The table indicates that, of
### TABLE 60

**ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "VOCATIONAL PREPARATION" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>2.903</td>
<td>1.451</td>
<td>17.584*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>32.523</td>
<td>0.083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>35.426</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

### TABLE 61

**CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5f**

<table>
<thead>
<tr>
<th></th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>3.721</td>
<td>3.540</td>
<td>3.750</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.181</td>
<td>.139*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.029</td>
<td>.127</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.210</td>
<td>.076*</td>
</tr>
</tbody>
</table>

*significant at .10 level
the three mean differences, only the senate-students difference is not significant.

Sub-hypothesis 5g: There is no significant difference among the responses of the academic senate members, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Advanced Training." Table 62 gives the analysis of variance, which yields a significant F-ratio. This indicates that there is a significant difference between the perceptions of the three respondent groups.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>6.934</td>
<td>3.467</td>
<td>53.736*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>25.421</td>
<td>0.065</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>32.355</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for sub-hypothesis 5g, the Scheffe a-posteriori test was performed. Table 63 provides the contrasts of means. The table indicates that of the three pair differences, only the senate-faculty difference is not statistically significant.

Sub-hypothesis 5h: There is no significant difference among the responses of the academic senate, faculty, and students of the University with respect to the "Should Be" goals of the University in
the area of "Research." Table 64 provides the analysis of variance, which yields a significant F-ratio. The data in the table show that there is a significant difference among the perceptions of the three groups. The null hypothesis is, therefore, rejected.

To test the differences between all possible pairs of means for the sub-hypothesis 5h, the Scheffé a-posteriori test was used. Table 65 gives the contrasts of means. As indicated in the table, all pair differences are significant.

Sub-hypothesis 5i: There is no significant difference among the responses of the academic senate, faculty, and students with respect to the "Should Be" goals of the National University of Rwanda in the area of "Meeting Local Needs." As presented in table 66, the analysis of variance, yielding a significant F-ratio, reveals that there is a significant difference among the perceptions of the three respondent
TABLE 64

**ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "RESEARCH" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>10.605</td>
<td>5.302</td>
<td>55.491*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>37.651</td>
<td>0.0955</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>48.257</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^significant at .05 level

TABLE 65

**CONTRASTS OF MEANS AND SCHIEFFE'S A-PRIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5b**

<table>
<thead>
<tr>
<th>Pairs</th>
<th>(\bar{X}_i - \bar{X}_j)</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.190</td>
<td>.149*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.496</td>
<td>.137*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.306</td>
<td>.083*</td>
</tr>
</tbody>
</table>

^significant at .10 level
TABLE 66
ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE"
IN "MEETING LOCAL NEEDS" GOALS AMONG
SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>18.160</td>
<td>0.080</td>
<td>98.918*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>36.167</td>
<td>0.092</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>54.327</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

groups. This justifies rejection of the null hypothesis.

To test the differences between all possible pairs of means for sub-hypothesis 5i, the Scheffé a-posteriori test was performed. Contrasts among means are reported in table 67. The table also shows that all differences are significant.

Sub-hypothesis 5j: There is no significant difference among the responses of the academic senate, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Public Service." Table 68 shows the analysis of variance, yielding a significant F-ratio. This indicates that there is a significant difference among the perceptions of the three respondent groups. The null hypothesis is, therefore, rejected.

To test the differences between all possible pairs of means for sub-hypothesis 5j, the Scheffé a-posteriori test was used. Table 69 presents the contrasts of means. As indicated in the table, all pair differences are statistically significant.
TABLE 67

CONTRASTS OF MEANS AND SCHEFFE'S A-PERIORI
TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5i

<table>
<thead>
<tr>
<th>Pairs</th>
<th>( \bar{X}_i - \bar{X}_j )</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>0.168</td>
<td>0.125*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>1.194</td>
<td>0.114*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>1.026</td>
<td>0.069*</td>
</tr>
</tbody>
</table>

*significant at .10 level

TABLE 68

ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE"
IN "PUBLIC SERVICE" GOALS AMONG
SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Sum Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>26.741</td>
<td>13.370</td>
<td>127.508*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>41.315</td>
<td>0.105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>68.057</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level
TABLE 69

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5j

<table>
<thead>
<tr>
<th>Pairs</th>
<th>( \overline{X}_i - \overline{X}_j )</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.635</td>
<td>.131*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.545</td>
<td>.120*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.090</td>
<td>.072*</td>
</tr>
</tbody>
</table>

*significant at .10 level

Sub-hypothesis 5k: There is no significant difference among the responses of the academic senate, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Democratic Governance." The analysis of variance, which yields a significant F-ratio, is reported in table 70. It indicates that there is a significant difference among the responses of the three respondent groups.

To test the differences between all possible pairs of means for sub-hypothesis 5k, the Scheffé a-posteriori test was performed. The contrasts of means are reported in table 71. The table reveals that, of the three pairs of mean differences, only the senate-faculty difference is not statistically significant.

Sub-hypothesis 5l: There is no significant difference among the responses of the academic senate, faculty, students of the National
### TABLE 70

**ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "DEMOCRATIC GOVERNANCE" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>19.434</td>
<td>9.717</td>
<td>104.402*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>36.671</td>
<td>0.093</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>56.105</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

### TABLE 71

**CONTRASTS OF MEANS AND SCHEFFE'S A-PÓSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5k**

<table>
<thead>
<tr>
<th></th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>3.009</td>
<td>2.895</td>
<td>2.789</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{x}_i - \bar{x}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.114</td>
<td>.134</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.220</td>
<td>.123*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.106</td>
<td>.074*</td>
</tr>
</tbody>
</table>

*significant at .10 level
University of Rwanda with respect to the "Should Be" goals of the University in the area of "Community." Table 72 presents the analysis of variance, which yields a significant F-ratio. This indicates that there is a significant difference between the perceptions of the three respondent groups. Thus, the null hypothesis is rejected.

**TABLE 72**

**ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "COMMUNITY" GOALS AMONG SENATE, FACULTY, AND STUDENTS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>32.687</td>
<td>16.343</td>
<td>152.038*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>42.354</td>
<td>0.107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>75.042</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

To test the differences between all possible pairs of means for sub-hypothesis 51, the Scheffé a-posteriori test was used. Table 73 presents the contrasts of means. The table shows that all the differences are statistically significant.

**Sub-hypothesis 5m:** There is a significant difference among the responses of the academic senate, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Intellectual/Aesthetic Environment." Table 74 provides the analysis of variance, which yields a significant F-ratio. This shows that there is a significant difference among the perceptions of the three respondent groups. The null hypothesis, therefore, is rejected.
TABLE 73

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI
TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 51

<table>
<thead>
<tr>
<th>Pairs</th>
<th>( \bar{X}_i - \bar{X}_j )</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.396</td>
<td>.158*</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.910</td>
<td>.145*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.514</td>
<td>.087*</td>
</tr>
</tbody>
</table>

*significant at .10 level

TABLE 74

ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE"
IN "INTELLECTUAL/AESTHETIC ENVIRONMENT" GOALS AMONG
SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>6.736</td>
<td>3.368</td>
<td>39.582*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>33.525</td>
<td>0.085</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>40.261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level
To test the differences between all possible pairs of means for sub-hypothesis 5m, the Scheffe a-posteriori test was performed. Table 75 reports the contrasts of means. As indicated in the table, of the three mean differences, only that of the senate-faculty is not statistically significant.

**TABLE 75**

**CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5m**

<table>
<thead>
<tr>
<th></th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>3.913</td>
<td>3.784</td>
<td>3.532</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i$-$\bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.129</td>
<td>.140</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.381</td>
<td>.129*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.252</td>
<td>.078*</td>
</tr>
</tbody>
</table>

*significant at .10 level

**Sub-hypothesis 5n**: There is no significant difference among the responses of the academic senate, faculty, and students of the National University of Rwanda with respect to the "Should Be" goals of the University in the area of "Innovations." Table 76 reports the analysis of variance, which yields a significant difference among the perceptions of the three respondent groups. Again, this clearly justifies rejection of the null hypothesis.

To test the differences between all possible pairs of means differences for sub-hypothesis 5n, the Scheffé a-posteriori test was used. Table 77 shows the contrasts of means. The table also indicates
TABLE 76

ONE-WAY ANALYSIS OF VARIANCE FOR "SHOULD BE" IN "INNOVATION" GOALS AMONG SENATE, FACULTY, AND STUDENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>23.779</td>
<td>11.889</td>
<td>132.274*</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Within groups</td>
<td>394</td>
<td>35.389</td>
<td>0.090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
<td>132.274*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at .05 level

TABLE 77

CONTRASTS OF MEANS AND SCHEFFE'S A-POSTERIORI TEST OF SIGNIFICANCE FOR SUB-HYPOTHESIS 5n

<table>
<thead>
<tr>
<th>Means</th>
<th>Senate</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.653</td>
<td>3.645</td>
<td>3.103</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pairs</th>
<th>$\bar{X}_i - \bar{X}_j$</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate-Faculty</td>
<td>.008</td>
<td>.145</td>
</tr>
<tr>
<td>Senate-Students</td>
<td>.550</td>
<td>.132*</td>
</tr>
<tr>
<td>Faculty-Students</td>
<td>.542</td>
<td>.079*</td>
</tr>
</tbody>
</table>

*significant at .10 level
that, of the three mean differences, only the senate-faculty difference is not statistically significant.

**Summary of Data Analysis**

The purpose of this chapter was to present and analyze the data yielded by the Institutional Goals Inventory, which was used to determine priority goals of the National University of Rwanda with a view to developing goals, objectives, and programs for the Adventist University of Central Africa.

First, data were analyzed descriptively. Then five hypotheses were advanced for testing. Descriptive results indicated that there was a discrepancy in each of the statement goals and goal areas. The respondent groups—senate, faculty, and students—agreed that the "Humanism/Altruism" goal area was the leading need priority. Faculty and students agreed that the "Individual Development" goal area was second.

Findings from the analyses of the null hypotheses for significant differences between and among perceptions of the three rating groups were as follows:

The results of the t-test analysis indicated that there was a significant difference between the means of "Is" and "Should Be" in the fourteen goal areas. This suggests that at the National University of Rwanda there is a need for improvement in the goal areas covered in this study.

The one-way analysis of variance indicated that there was no significant difference among the perceptions of the three responding groups with respect to "Is" and "Should Be" for each of the fourteen goal areas.
goal areas. Moreover, an analysis of the tests of significance of contrasts of means between all possible pairs indicated that the differences between contrasts of means were statistically significant in most cases.
CHAPTER V

SUMMARY, CONCLUSIONS AND IMPLICATIONS,
AND RECOMMENDATIONS

This chapter is divided into three parts. The first part is a summary presenting the purpose and importance of the study; the second part presents a summary of findings, and the third part presents conclusions and implications, and recommendations.

Summary of the Purpose and Importance of the Study

The Purpose of the Study

The purpose of this study was to identify and to determine potential goals of the National University of Rwanda and to present them in their order of priority, with a view toward developing goals, objectives, and programs for the Adventist University of Central Africa. It attempted to identify, determine, and establish priorities among the following fourteen goal areas: (1) Academic Development, (2) Intellectual Orientation, (3) Individual Personal Development, (4) Humanism/Altruism, (5) Cultural/Aesthetic Awareness, (6) Vocational Preparation, (7) Advanced Training, (8) Research, (9) Meeting Local Needs, (10) Public Service, (11) Democratic Governance, (12) Community, (13) Intellectual/Aesthetic Environment, (14) Innovation.

The first ten are outcome goal areas; the last four are process goal areas. Each goal area consists of four goal statements for a total of fifty-six goal statements.
Significance of the Study

The government of Rwanda authorized the Seventh-day Adventist Church to establish and operate a private university. The government committed itself to recognize degrees and diplomas bestowed by the proposed university. The church was required, and agreed, to maintain a standard equivalent to that of the state university and to have the programs for the proposed university approved by the Ministry of Higher Education prior to their implementation.

It is anticipated that the results of this study will provide guidelines for goals, objectives, and curriculum development for the Adventist University of Central Africa. It could help to create an awareness of the programs needed to meet some of the needs in Rwanda.

The Review of Related Literature

The review of related literature was divided into two sections. The first presented a review concerning the goals of higher education in the Seventh-day Adventist Church. This section showed that the educational system of the church shares with other systems the concern for preparing students for usefulness in their communities. However, its major concern is the integration of the Bible in the programs offered; it puts a major emphasis on the spiritual dimension which other systems of higher education do not have.

The second section deals with the review of literature and research done using the Institutional Goals Inventory to determine college or university goals and to establish their priorities. This section helped to demonstrate that there are no priority goals unanimously agreed upon by all colleges and universities. This suggested
that needs are different for different communities.

On the basis of the review of literature, a conclusion was drawn that each college or university has a duty to determine its own goals and assign priorities to them according to the need in the community it is supposed to serve.

**Instrumentation, Population, and Methods of Analysis**

**Data Gathering Instrument**

The data gathering instrument for this study was the French version of the *Institutional Goals Inventory*. It was obtained, adapted, and used with permission from the Educational Testing Service for College and University Programs.

**Population and Sample Size**

The population used in this study included all 26 academic senate members, all 86 faculty members, and a sample of 285 students randomly selected from a total of 1029 students enrolled at the National University of Rwanda during the school year 1981-82.

**Methods of Analysis**

First, data were analyzed descriptively. To identify goals and to determine their order of priority, the means of "Is" and "Should Be" were computed for each goal statement and for each goal area. A listing of the discrepancies between the means of the "Is" and "Should Be" goal statements or goal areas was used to determine priorities among them. The discrepancies were ranked for the four goal statements in a given goal area and for all the fourteen goal areas.

The Spearman rank correlation coefficient was calculated to
determine if there was a relationship of priority ranking order of the
fourteen goal areas between perceptions of senate and faculty, senate
and students, and faculty and students.

Five hypotheses were advanced for testing the significance
between and among the responses of the three responding groups.

Summary of Major Findings

From descriptive analysis, the major findings were as follows:
The three rating groups agreed that there was a discrepancy
between "Is" and "Should Be" on each goal statement. In each case
the mean of "Should Be" was above that of "Is".

All three responding groups unanimously agreed on the highest
need priority goal statement in eight goal areas as follows:

#12 To help students be open, honest, and trusting in their
relationship with others (in Individual Personal Development
goal areas).

#13 To encourage students to become conscious of the important
moral issues of our time (in Humanism/Altruism goal area).

#33 To assist students deciding upon a vocational career (in
Vocational Preparation goal area).

#36 To conduct advanced study in specialized problem areas,
e.g., through research centers (in Advanced Training goal
area).

#30 To conduct basic research in social studies (in Research
goal area).

#24 To provide opportunity for continuing education in the
local area, e.g., on part-time basis (in Meeting Local Needs
goal area).

#45 To centralize decision making to the greatest extent possible
(in Democratic Governance goal area).

#54 To experiment with new approaches to individual or group
research projects (in Innovation goal area).

All three respondent groups unanimously agreed that there
was a discrepancy between "Is" and "Should Be" in each of the fourteen goal areas.

For the senate, the following were the first four ranking priorities, given in their order of priority:

1. Humanism/Altruism, with a discrepancy of -2.365
2. Public Service, with a discrepancy of -2.259
3. Individual Personal Development, with a discrepancy of -2.048
4. Meeting Local Needs, with a discrepancy of -1.980.

For the faculty the four highest need ranking priority goal areas were as follows:

1. Humanism/Altruism, with a discrepancy of -2.2234
2. Individual Personal Development, with a discrepancy of -1.1668
3. Research, with a discrepancy of -1.482
4. Community, with a discrepancy of -1.383.

To the students, the four top need priority goal areas were as follows:

1. Humanism/Altruism, with a discrepancy of -1.787
2. Individual Personal Development, with a discrepancy of -1.655
3. Vocational Preparation, with a discrepancy of -1.448
4. Community, with a discrepancy of -1.345.

From the five null hypotheses presented in this study, the findings were as follows:

Hypothesis 1: It was hypothesized that there is no significant difference between "Is" and "Should Be" goals of the National University
of Rwanda as perceived by the senate. This hypothesis relates to fourteen separate goal areas and hence it was tested for fourteen sub-hypotheses, a to n.

Findings from the analysis of this hypothesis revealed that there was a significant difference between the means of "Is" and "Should Be" in each of the fourteen goal areas as perceived by the senate. Therefore, the null hypothesis was rejected.

Hypothesis 2: This hypothesis states that there is no significant difference between "Is" and "Should Be" goals of the National University of Rwanda as perceived by the faculty. This hypothesis was tested for each of the fourteen separate goal areas, a to n, corresponding to those under hypothesis 1.

The analysis of this hypothesis indicated that there was a significant difference between the means of "Is" and "Should Be" in each of the fourteen goal areas as perceived by the faculty. Thus, the null hypothesis was rejected.

Hypothesis 3: It was hypothesized that there was no significant difference between the means of "Is" and "Should Be" goals of the National University of Rwanda as perceived by students. This hypothesis was tested for each of the fourteen separate goal areas, a to n, corresponding to those under hypothesis 1.

Findings from the analysis of this hypothesis indicated that there was a significant difference between the means of "Is" and "Should Be" goals of the National University of Rwanda as perceived by students. Again the null hypothesis was rejected.

Hypothesis 4: This hypothesis states that there is no significant difference among the responses of the senate, faculty, and students
with respect to the "Is" goals of the National University of Rwanda. This hypothesis was tested for each of the fourteen separate goal areas, a to n, corresponding to those under hypothesis 1.

The analysis of hypothesis 4 revealed that on each of the fourteen goal areas, there was a significant difference among the responses of the three responding groups--senate, faculty, and students--with respect to "Is" goals of the National University of Rwanda. Thus, the null hypothesis of no significance was rejected.

**Hypothesis 5:** It was hypothesized that there was no significant difference among the responses of the senate, faculty, and students with respect to the "Should Be" goals of the National University of Rwanda. This hypothesis was tested for each of the fourteen separate goal areas, a to n, corresponding to those under hypothesis 1.

Findings from the analysis of this hypothesis indicated that there was no significant difference among the responses of the three rating groups with respect to "Should Be" goals of the National University of Rwanda. Thus, the null hypothesis was rejected.

**Conclusions and Implications**

From the foregoing findings, the following conclusions are drawn and certain implications are derived.

1. Since there was a consensus of discrepancies between what "Is" and what "Should Be" on all four goals contributing to each of the fourteen goal areas and consequently on each of the fourteen goal areas, it would appear that the institution was in need of improvement.

2. Perceived discrepancies between present performance and desired results provide an agenda for study, discussion, and
determination of goals, objectives, and programs for the Adventist University of Central Africa.

The implication is that the Adventist University of Central Africa is being established during the appropriate time to meet the challenge.

3. Since all the three responding groups unanimously agreed that "Humanism/Altruism" goal area is the highest need priority, this suggests a concern of the rating groups over the world peace, moral issues, and welfare of human kind.

This implies that the Adventist University of Central Africa could meet this need with Bible integrated programs and its spiritual dimension lacking in the non-church oriented systems of education.

**Recommendations**

The following recommendations are presented for consideration and possible adoption, and are consistent with the literature reviewed, the data presented, and the conclusions reached. It is recommended that the Adventist University of Central Africa:

1. Use this study as a framework within which to develop goals, objectives, and curricula

2. Determine its religious, intellectual, occupational, physical, and social goals and objectives consistent with the purposes of higher education

3. Direct its goals and objectives to meet the needs of the Adventist society in francophone Africa

4. Include representatives from local Adventist churches in the process of goal identification and determination of priorities

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5. Conduct a study similar to the above at the conclusion of the first academic year, and thereafter at regular intervals to facilitate self-study and evaluation.

6. Undertake a study to assess the need for continuing education programs for personal and professional development of the worker force of the church in francophone Africa.
APPENDIXES
APPENDIX A

QUESTIONNAIRES

English Version
French Version
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

132-146
APPENDIX B

CHARTER OF THE ADVENTIST UNIVERSITY
OF CENTRAL AFRICA

English Version

French Version
On the One Part

The Government of the Republic of Rwanda, represented by His Excellency Mr. MUTEMBEREZI Pierre-Claver, Minister of National Education,

And on the Other Part

The Seventh-day Adventist Church, represented by Mr. M. L. Mills, President of the Trans-Africa Division of Seventh-day Adventists;

Considering the request of the Seventh-day Adventist Church of 21 September, 1978, to establish an Adventist University in Rwanda;

Considering the Government's agreement given under date of 30 October, 1978, to the Seventh-day Adventist Church, for the purpose of creating this University;

It is agreed as follows:

Article I.

The Government of the Republic agrees to:

a. Authorize the Seventh-day Adventist Church to create an Adventist University in Rwanda hereinafter called "University";

b. Place at its disposition the land situated at Hudende in the Commune of Mutura in the Prefecture of Gisenyi for the construction of this University;

c. Guarantee to the University the rights generally accorded the establishments of the same nature;

d. Recognize the diplomas bestowed by this University under the provisions of the laws and regulations pertaining thereto;

e. Leave to the governing body of the University complete liberty in the choice of staff, the organization of instruction, the admission of students and the establishing of the University's regulations.
**Article II**

The Seventh-day Adventist Church commits itself to:

a. Construct, equip and maintain a university consisting of schools, institutes, and departments prepared to offer intellectual, moral, vocational and religious instruction;

b. Obtain Government approval of the programs of the schools, institutes and departments of the university;

c. Establish the headquarters of the university as well as the center of its activities, in Rwanda at the site named above;

d. Accept students under the provisions of the laws and regulations in force, without distinction of nationality, race, clan, color, sex, religion or political opinion;

e. Provide teaching in this university at a level at least equivalent to that recognized in Rwandese institutions of higher education of the same nature;

f. Accept the obligations generally assumed by institutions of higher education, with special attention to favorable working conditions of the students and their discipline;

g. Hold the assets of the university on the basis of a non-profit organization under the control of a board composed of representatives of the Seventh-day Adventist Church;

h. Care for the administration of the university, its campus, the recruitment and discipline of the administrative and teaching personnel of the University.
CONVENTION RELATIVE À L'UNIVERSITÉ ADVENTISTE DE L'AUTRICHE CENTRALE.

Entre

D'une part

Le Gouvernement de la République Rwandaise, représenté par
Son Excellence Monseigneur MUTAMIREZI Pierre-Claver, Ministre de l'Education Nationale;

et d'autre part

L'Eglise Adventiste du Septième jour représenté par Pasteur
M.L. Mills, Vice-Président de la Conférence Générale et Président de la Division Trans-afro-Asiatiqne;

Considérant la requête de l'Eglise Adventiste du Septième jour du 21 septembre 1973, d'établir une Université Adventiste au Rwanda;

Considérant l'accord du Gouvernement Rwandais donné en date du 30 octobre 1978 à l'Eglise Adventiste du Septième jour, en vue de la création de cette Université;

Il a été convenu ce qui suit:

Article 1er:

Le Gouvernement de la République s'engage à :

a- Autoriser l'Eglise Adventiste du Septième jour à créer l'Université Adventiste de l'Afrique Centrale au Rwanda ci-dessous dénommée "Université";

b- Mettre à sa disposition le terrain sis à Kudando en Commune Mubaro Préfecture de Gisenyi pour la construction de cette Université;

c- Garantir à l'Université les droits généralement accordés à des établissements du même genre;

d- Reconnaître les diplômes délivrés par cette Université sous réserve des lois et règlements en vigueur en la matière;

e- Laisser complète liberté au Conseil d'Administration de l'Université dans le choix des professeurs, l'organisation de l'enseignement, l'admission des étudiants et l'établissement des règlements de l'Université.

Article 2:

L'Eglise Adventiste du Septième jour s'engage à :

a- Construire, équiper et entretenir une Université ayant en son sein des Facultés, des Instituts et des Départements susceptibles d'offrir une Instruction intellectuelle, morale, professionnelle et religieuse;

b- Faire approuver par le Gouvernement les programmes des Facultés, des Instituts et des Départements de l'Université;
c- Etablir au Rwanda au lieu ci-haut cité le siège de l'Université ainsi qu.
le centre de ses activités;
d- Accepter sous réserve des lois et règlements en vigueur, les étudiants
sans distinction de nationalité, de race, de sexe, de couleur, de religion,
d'opinion ou du position sociale;
e- Dispenser dans cette Université un enseignement du même niveau au moins équiva-
ment à celui qui est reconnu dans les établissements rwandais d'enseigne-
ment supérieur de même nature;
f- Accepter les obligations généralement assurées par les établissements
d'enseignement supérieur, en insistant notamment sur les conditions de
travail favorables aux études et à la discipline;
g- Constituer le Patrimoine de l'Université sur base du Principe de
l'Association sans But Lucratif, sous la gestion du Conseil d'Admi-
istration composé de représentants de l'Église Adventiste du Septième Jour;
h- Assurer l'administration de l'Université, la police des Campus, le
recrutement et la discipline du personnel administratif et enseignant de
l'Université.

Article 3 :

La Présente Convention est valable pour une durée de 50 ans et est
renouvelable par tacite reconduction.
Si l'une des Parties dénonce la Convention, un préavis de 18 mois est rendu
nécessaire et notifié à l'autre Partie sous pli recommandé.

Article 4 :

Pour tout ce qui ne serait pas prévu à la présente Convention, les
Parties s'engagent à se référer à la législation rwandaise ainsi qu'aux
normes et usages d'ordre international en la matière.

Article 5 :

La présente Convention sort ses effets à la date de sa signature
par les deux Parties contractantes.

Kigali, le... (signature)

Pour le Gouvernement de la
République Rwandaise,
Ministre de l'Éducation Nationale,

[Signature]

Pour l'Église Adventiste
du Septième Jour,
Pastor M.L.Mills,
Vice-Président de la Conférence
Générale et Président de la
Division Trans-Africaine.

[Signature]
CONTRAT DE CESSATION GRATUITE No AR 267——

LA REPUBLIQUE RWANDAISE, représentée par son Ministre de l'Agriculture et de l'Élevage ayant le Service des Terres

DANSEMENT, pense gracieusement en bonne propriété à l'Association sans but lucratif : "Ecole Adventiste du

Septième Jour, B.P. 247 KIGALI——

RÉPUBLIQUE RWANDAISE, représentée par son Ministre de l'Agriculture et de l'Élevage ayant le Service des Terres,

DANSEMENT, pense gracieusement en bonne propriété à l'Association sans but lucratif : "Ecole Adventiste du

Septième Jour, B.P. 247 KIGALI——

ARTICLE PREMIER——

Le présent contrat de cession gratuite prend cours à la date de sa signature.

ARTICLE DEUX——

L'Association ne peut détacher le terrain de sa destination prête au présent contrat.

ARTICLE TROIS——

La mise en valeur du terrain devra se faire conformément à la destination dont elle est faite par construction d'Université.

ARTICLE QUATRE——

L'Association a l'obligation de débarrasser régulièrement le terrain de tout usage du terrain dans un bon état de propreté.

ARTICLE CINQ——

L'Association a l'obligation de faire procéder au nettoyage et bûcherage du terrain par un géomètre reconnu par le Gouvernement Rwandais.

ARTICLE SIX——

Les surfaces de terrain occupées par les établissements publics ainsi que par leurs dépendances, les fosses d'égouts, les égouts, les chemins de culture et de plantation, les bâtiments et les planchers de fer on es couverts avec ces mêmes établissements restent la propriété appartenant à l'État qui les met à la disposition du demandeur, le nombre de toutes leurs surfaces restant compris dans celle du terrain faisant objet de présent contrat.

ARTICLE SEPT——

Il est strictement interdit à l'Association de louer ou de prêter du terrain, de le grever d'hypothèque ou de servitude, et d'en changer la destination.

Le terrain ne pourra être mortel ni aliéné.

ARTICLE HUIT——

L'Association s'engage à occuper le terrain et commencer sa mise en valeur dans l'année de la prise en cours du présent contrat.

La nature ainsi que les limites du terrain sont parfaitement connues par l'Association.

CONDITIONS SPÉCIALES——

La nature ainsi que les limites du terrain sont parfaitement connues par l'Association.
ARTICLEPREMIER:

L'expiration des conditions prévues à l'article 5 alinéas 1 et 2 du décret du 21 janvier 1941 sera constatée par procès-verbal du délégué du Gouvernement Rwandais. L'Association engage des lois, a rempli dans le cas de débâcles, les formalités prévues par la loi, suite aux signes houiss renvoyés au Rwanda, en vue à l'enregistrement de ces actes au nom de la République Rwandaise.

ARTICLE DIX:

Si la durée du mandat du trésorier, au moyen des mesures prévues par la loi, est terminée, il se trouve que la superficie n'atteint pas celle prévue au présent contrat, la superficie extérieure sera réduite à celle terainée.

Par contre, si ce mandat était constaté une superficie supérieure à celle terainée, le souscripteur s'engage à reconnaître volontairement le dépassement dans un mois, jour pour jour, de la signification, par lettre recommandée sous pli, pour toute compensation au demandeur : indemnisations des intérêts ou annuities à quelconque titre que ce soit.

ARTICLE ONZE:

Les frais de mandataire et de bureau sont à charge de l'Association.

ARTICLE ONZÉME:

L'association des conditions générales du décret du 21 janvier 1941 et des conditions spéciales répétées dans les lettres recommandées, l'Association ne santant pas en toutes obligations dans un délai qui lui sera fixé par le Ministre de l'Agriculture et de l'Elevage.

ARTICLE TRENZÉ:

Pour l'exécution des présentes et de toutes leurs suites, les parties font élection de domicile : la République Rwandais chez le Ministre de l'Agriculture et de l'Elevage, en ses bureaux à Kigali, et l'Association en les bureaux du Préfet de la Préfecture dans lequel se trouve le bien à louer visé au cours significations, sous commandements, sous exploiting, ou autres modifications pourront être valablement faits au domicile.

Annexe à Kigali, en double expédition, le 05-06-1900 quatre-vingt.

Le mandataire :  
Pour l'Association :  

1.

La clé :
Pour la République Rwandais,  
Le Ministre de l'Agriculture et de l'Elevage,  

Pasteur  

SHIZIKA Etienne.  

[Signature]

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APPENDIX D

CORRESPONDENCE
Par la présente, j'atteste que le Gouvernement Rwandais est convaincu que le projet de création de "l'Université Adventiste de l'Afrique Centrale" contribuera à la réalisation des objectifs assignés à l'enseignement rwandais.

Aussi, consciente de l'intérêt que présente une telle Université, la République Rwandaise n'a pas hésité à :
- lui octroyer les terrains nécessaires à la réalisation de sa noble cause;
- s'engager à reconnaître les diplômes délivrés par cette Université sous réserve du respect de la Convention y relative. C'est pourquoi je recommande ce projet à toute personne physique ou morale qui voudra y contribuer.

Fait à Kigali, le 19 NOV. 1980

MINISTRE Pierre-Claver
Ministre de l'Education Nationale
December 4, 1981

Ms. Nancy Buck, Director  
ETS College and University Programs  
Princeton, NJ 08541

Dear Ms. Beck:

I am a foreign graduate student at Andrews University, Michigan. I come from Rwanda in Central Africa.

Your institutional goal inventory instrument which I have just received from your office has interested me very much. I would like to use it in attempting a study that would help to improve higher education back home in Rwanda, Africa.

In order for this instrument to be efficiently applied for the purpose of my study, may I kindly ask you to:

1. authorize me to use it for my study  
2. let me have your written permission to modify it so that it may suit our needs, culture and background in Rwanda.  
3. allow me to have the modified copy reprinted for my study in the French language.

Your help on this matter will be very much appreciated.

Looking forward to a favourable reply from you and thanking you in advance.

Very sincerely yours,

Pheneas Bahimba

[Signature]

Dr. Bernard LiiH  
Professor of Education Administration

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TO WHOM IT MAY CONCERN

Mr. Phenias Bahimba is a student in the Doctor of Education program in good and regular standing here at Andrews University.

He is at the point of isolating and defining his dissertation problem and doing the initial data gathering for it. Any courtesy that can be extended to him in the use of library facilities and/or the visitation of classes and laboratories will be appreciated.

Sincerely,

Robert A. Williams, Director
Doctor of Education Program and
Dean, School of Graduate Studies

ibg
Objet: Questionnaire

Monsieur le Président de l'U.N.D.U.H.

Monsieur le Président,

Par la présente, je porte à votre connaissance que l'Université adventiste de l'Afrique Centrale, actuellement en train de s'installer à Gisenyi, souhaite connaître les avis d'un certain nombre de nos étudiants à propos des objectifs actuellement recherché par notre institution. L'objectif est d'en tenir compte lorsqu'elle - même va commencer à fonctionner.

Voilà pourquoi, je vous demanderais de distribuer le questionnaire ci-joint à 300 membres de l'U.N.D.U.H. (315 à Butare, les deux localités et 65 à Ruhengeri) et de déposer les réponses où il n'est pas demandé de mentionner les noms auprès des services aux étudiants respectifs.

Comptant sur votre compréhension,
je vous réitère ma volonté de franche collaboration.

Copie pour information:
Dr. Venant NTABAHURA
Directeur du Service aux Etudiants (tous)
Objet: Questionnaire

Monsieur le Professeur,
Monsieur le Chercheur,

Monsieur,

L'Université adventiste de l'Afrique Centrale m'a contacté pour que vous remplissiez le questionnaire ci-joint. Le but poursuivi est de tenir compte de vos avis dans la mise sur pied de ses programmes. Cette Université qui s'installe actuellement à Gisenyi est la première Université privée au Rwanda.

Les informations qui vous sont demandées seront confidentielles comme il se doit. C'est pourquoi d'ailleurs votre nom ne doit pas être mentionné sur le questionnaire.

Après avoir rempli le questionnaire, veuillez le déposer respectivement au près des personnes suivantes:

- Campus de Butare: Chez le Secrétaire Général à l'U.N.R.
- Campus de Ruhengeri à Ruhengeri: Chez le Président du C...S.R.
- Campus de Ruhengeri à Butare: Chez le Responsable du Campus de Ruhengeri à Butare.

Comptant sur votre compréhension habituelle, je vous réitère ma volonté de franche collaboration.

Copie pour information à:

- Monsieur le Secrétaire Général de l'U.N.R. BUTARE.
- Monsieur le Président du C...S.R. B.P. 44 - RUHEGERI.
- Monsieur le Responsable du Campus de Ruhengeri à Butare B.P. 56 - BUTARE.

Dr. Venant NTABOLIVURA
Recteur
LIST OF REFERENCES


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Miller, H. D. "Goals of Ball State University as Seen by Selected Students, Faculty, and Administrators." (Ed.D. dissertation, Ball State University, 1974.) Dissertation Abstracts International 35/10 (April 1975):6482 A.


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VITA

NAME: Phenias Bahimba

DATE AND PLACE OF BIRTH: 28 October 1939; Rukoma, Nkuli, Rwanda

PROFESSIONAL TRAINING:

1971 B.A., Solusi College, Bulawayo, Zimbambwe (Major: Theology)

1976 M.A., Philippine Union College, Manila, Philippines (Major: Educational Administration)

1982 M.A., Andrews University, Berrien Springs, Michigan (Major: Educational Psychology)

1984 Ph.D., Andrews University, Berrien Springs, Michigan (Major: Educational Administration)

PROFESSIONAL EXPERIENCE:

1959-60 Junior High School Teacher, Rwankeri Mission, Ruhengeri, Rwanda

1961-67 Public Administrator (Burgomaster), Communes Gatovu and Nkuli, Ruhengeri, Rwanda

1972-75 Secondary Teacher/Church Pastor, Gitwe Adventist College, Nyabisindu, Rwanda

1976-78 Vice-principal, Gitwe College, Nyabisindu, Rwanda

1979 Acting Principal, Gitwe College, Nyabisindu, Rwanda

1984- Director, Department of Education, Africa-Indian Ocean Division of Seventh-day Adventists