# **Andrews University**

# Digital Commons @ Andrews University

**Dissertations** Graduate Research

1984

# Relationship Between Four Temperament Types and Nineteen **Spiritual Gifts**

Roland L. Joachim Andrews University

Follow this and additional works at: https://digitalcommons.andrews.edu/dissertations



Part of the Personality and Social Contexts Commons, and the Religion Commons

# **Recommended Citation**

Joachim, Roland L., "Relationship Between Four Temperament Types and Nineteen Spiritual Gifts" (1984). Dissertations. 470.

https://digitalcommons.andrews.edu/dissertations/470 https://dx.doi.org/10.32597/dissertations/470/

This Dissertation is brought to you for free and open access by the Graduate Research at Digital Commons @ Andrews University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact repository@andrews.edu.



Thank you for your interest in the

# Andrews University Digital Library of Dissertations and Theses.

Please honor the copyright of this document by not duplicating or distributing additional copies in any form without the author's express written permission. Thanks for your cooperation.

#### INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

- 1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the file, along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
- 2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
- 3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
- 4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
- 5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

University Microfilms International 300 N. Zeeb Road Ann Arbor, MI 48106



Joachim, Roland Lerius

# PELATIONSHIP BETWEEN FOUR TEMPERAMENT TYPES AND NINETEEN SPIRITUAL GIFTS

**Andrews University** 

Ph.D. 1984

University
Microfilms
International 300 N. Zeeb Road, Ann Arbor, MI 48106

Copyright 1985
by
Joachim, Roland Lerius
All Rights Reserved



# PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark  $\sqrt{\phantom{a}}$ .

1.	Glossy photographs or pages
2.	Colored illustrations, paper or print
3.	Photographs with dark background
4.	Illustrations are poor copy
5.	Pages with black marks, not original copy
6.	Print shows through as there is text on both sides of page
7.	Indistinct, broken or small print on several pages
8.	Print exceeds margin requirements
9.	Tightly bound copy with print lost in spine
10.	Computer printout pages with indistinct print
11.	Page(s)lacking when material received, and not available from school or author.
12.	Page(s) seem to be missing in numbering only as text follows.
13.	Two pages numbered Text follows.
14.	Curling and wrinkled pages
15.	Dissertation contains pages with print at a slant, filmed as received
16.	Other

University
Microfilms
International



# Andrews University School of Graduate Studies

# RELATIONSHIP BETWEEN FOUR TEMPERAMENT TYPES AND NINETEEN SPIRITUAL GIFTS

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

By
Roland L. Joachim
August 1984

# RELATIONSHIP BETWEEN FOUR TEMPERAMENT TYPES AND NINETEEN SPIRITUAL GIFTS

A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

bу

Roland L. Joachim

Chairman: Roy-E. Nadan

Dean, School of Graduate Studies

Selma Chair
Selma Chair

Selma Chair

Dean, School of Graduate Studies

Outsland 15, 1984

Date approved

Wilfred Futcher

© Copyright by Roland L. Joachim
All Rights Reserved

# **ABSTRACT**

# RELATIONSHIP BETWEEN FOUR TEMPERAMENT TYPES AND NINETEEN SPIRITUAL GIFTS

Ву

Roland L. Joachim

Chairman: Roy C. Naden

# ABSTRACT OF GRADUATE STUDENT RESEARCH Dissertation

# Andrews University School of Graduate Studies

Title: RELATIONSHIP BETWEEN FOUR TEMPERAMENT TYPES AND NINETEEN

SPIRITUAL GIFTS

Name of researcher: Roland L. Joachim

Name and degree of faculty adviser: Roy C. Naden, Ed.D.

Date completed: August 1984

### Problem

No studies have been found that examine empirically the possible relationship between temperament and spiritual gifts. Traditionally they have been seen as offspring of discrete disciplines, the former belonging to the realm of psychology and the latter to theology. When some writers recently hypothesized a possible correlation between temperament and spiritual gifts, others discredited the notion.

This study was undertaken to investigate the possible correlation between the traditional four temperament types and a selection of nineteen spiritual gifts of the New Testament.

#### Method

The data base for this study consisted of 1,067 Christian graduate students and church members from Illinois, Indiana, Michigan, and Kansas. Subjects were of both sexes and included Blacks, Caucasians, and Hispanics. Two standardized instruments were administered: Temperament Inventory (Cruise & Blitchington, 1977) and The Spiritual Gifts Inventory (Naden & Cruise, 1981). Seven null hypotheses were formulated and tested.

### Results

The findings suggest that there is a correlation between the four temperament types and spiritual gifts of the New Testament. However, some gifts did not appear in any correlation, e.g., the gift of Martyrdom. This may be because of the size or the components of the sample.

In the case of Caucasians, the relationships are similar for both sexes. The samples for the other two ethnic groups were too small for a comparison of sexes within and between the groups.

One notable difference among the Hispanic subject lies in the fact that there was no correlation between the gift of administration and any temperament. This absence may be attributed to the reduced size or the quality of this sample.

The relationships found could be summarized as follows:

	Temperament					
Gift	Sanguine	Choleric	Melancholic	Phlegmatic		
Primary	Administration	Leadership	Evangelism	Wisdom		
Secondary	Leadership	Wisdom				
Tertiary	Hospitality	Helps				

- There is a significant correlation between the sanguine temperament and the gifts of administration, leadership, and hospitality.
- 2. There is a significant correlation between the choleric temperament and the gifts of leadership, wisdom, and helps.
- 3. There is a correlation between the melancholic temperament and the gift of evangelism.
- 4. There is a correlation between the phlegmatic temperament and the gift of wisdom.
- 5. Not all the gifts appear in the correlation with the four temperaments.

# TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vii
LIST OF HEBREW AND GREEK WORDS	viii
ACKNOWLEDGMENTS	x
Chapter	
I. INTRODUCTION	1
Statement of the Problem	6 7 7 10 11
II. REVIEW OF LITERATURE	16
Spiritual Gifts	16 16 22 26 28 29 30
Distribution of Gifts among Believers Purpose of Spiritual Gifts	31 32 34 35 37 37
Resurgence of the Four-Temperament Doctrine A Cateyorical System of the Kantian Era Definitions	39 39 41 43 51 51
Temperament Relationships	56 58 59

	The Environmentalist Position							61
	A Third Position: The Interactive View							62
	Summary							66
III.	METHODOLOGY				•		•	68
	Type of Study	_	_			_	_	68
	Population and Sample	•	•			•	•	68
	Instrumentation							70
	Temperament Inventory	•	•		•	•	•	70
								70
	Formation	•	•	•	•	•	•	70
	Reliability	•	•	•	•	•	•	
	Validity							72
	The Spiritual Girs Inventory							74
	Formation							74
	Reliability							75
	Validity					•	•	75
	Pilot Studies of Possible Relationship bet	WE	er	1				
	Temperament and Spiritual Gifts							76
	Procedures for Collecting Data							76
	Hypotheses and Statistical Analysis							79
	Summary							81
IV.	PRESENTATION AND ANALYSIS OF DATA			•	•		•	83
	Subjects Used in the Study							83
	Analysis of Data and Testing of Hypotheses			•	•	•	•	83
								101
	Summary		•	•	•	•	•	101
٧.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .							103
								100
	Summary			•	•	•	•	103
	Purpose							103
	Review of Related Literature and Researc							104
	Research Design, Population, and Instrum	e	nta	аt	io	n		107
	Findings of the Study							108
	Conclusions							111
	Implications							114
	Recommendations							115
	The Commentation of the Comment of t							
APPEN	DICES		•			•		117
Α.	Schools Used in the Sample							118
								121
3.	Churches Used in the Sample		•	•	•	•	•	12
С.	Tables Showing Means and Standard							10
_	Deviation for the Samples							124
D.	Correspondence					•	•	133
Ε.	Raw Scores					•		147
F.	Percentile for Temperaments		•	•	•	•	•	163
BIBLI	OGRAPHY							18
								20

# LIST OF TABLES

1.	Temperaments According to Elsenhans	52
2.	Distribution of Respondents according to Sex, Marital Status, and Ethnic Background	70
3.	Summary of the Pilot Study on Thirty-two School Teachers	77
4.	Canonical Correlation Key to Variables Used	85
5.	Canonical Correlation for the Total Sample	87
6.	Canonical Correlation for the Total Male Sample	89
7.	Canonical Correlation for the Total Female Sample	92
8.	Canonical Correlation for the Total Black Sample	94
9.	Canonical Correlation for the Total Hispanic Sample	96
10.	Canonical Correlation for the Male Caucasian Sample	98
11.	Canonical Correlation for the Female Caucasian Sample .	100
12.	Canonical Correlation between Temperaments and Spiritual Gifts According to Sex and Ethnic Backgrounds	102
13.	Means and Standard Deviation for the Variables of the Total Sample	125
14.	Means and Standard Deviation for the Variables of the Male Sample	126
15.	Means and Standard Deviation for the Variables of the Female Sample	127
16.	Means and Standard Deviation for the Variables of the Black Sample	128
17.	Means and Standard Deviation for the Variables	129

18.	 	Standard Deviation for the Variables Male Caucasian Sample	1 30
19.	 	Standard Deviation for the Variables Female Caucasian Sample	131

# LIST OF FIGURES

1.	Kant's Conception of Simple and Exclusive Temperaments	40
2.	Wundt's Proposition Regarding the Speed of Change and the Strength of Temperaments	44
3.	Eysenck's Introvert and Extravert Categories Based on Jung's Theory. Introversion and Extraversion Partake of Neuroticism. The Normal Group Differs Significantly from the Neurotic Population	48
Л	Hypothetical Polation between FDI and TI Factors	73

# LIST OF HEBREW AND GREEK WORDS

- hen, chen; grace, human favor, God's free, unmerited graciousness to men, beauty, approval

- hesed, chesed; goodness, loving-bindness, mercy

רוח - rûah, ruach; wind or breath, deep breathing of men (in anger, grief, zeal), power to produce great feats of strength

διακονία - diakonia; function of servant, service, aid

δίδωμι - (root: do) didomi; I give

δωρεά - dorea; gift, a gratuity

5ωρέω - doreo; I give a present

οώρημα - dorēma; a testament, a gift, an offering

5ῶρον - doron; a gift, a present

ένέργημα - energema; an effect, operation, working

ένεργήματα - energemata (accusative plural of ενεργημα); effects, operations, workings

- ergon; work, labor, toil (as an effort or occupation, deed)

τνεδυα - pneuma; blast or wind, breath or breathing, metaphorically the way the wind blows, i.e., prevailing influence

τνευμάτα - pneumata (accusative plural of πνευμα)

τνευματικός - pneumatikos; non-carnal, supernatural, spiritual

paνέρωσις - phanerosis; expression, exhibitions, a bestowment, manifestation

- chara; joy, gladness, cheerfulness, calm delight

χάους - charis; grace, beauty, charm, what gives joy

viii

χαρά

χαρύζομαι - charizomai; I grant as a favor, I give freely, forgive

- charisma; a gratuity, deliverance (from danger, passion) or rescue, a (spiritual) endowment, miraculous faculty, (free) gift

χαρίσματα - charismata (accusative plural of χάρισμα)

### **GREEK EXPRESSIONS**

γνῶθι σεαυτόν gnothi seauton; [man], know thyself

- 1 Cor 12:1 περι δε τῶν πνευματικῶν, ἀδελφοί peri de ton pneumatikon, adelphoi Now concerning spiritual gifts, brethren
- 1 Cor 12:4 διαιρέσεις δε χαρισμάτων εἰσίν diareseis de charismaton eisin Now there are diversities of gifts
- 1 Cor 12:7 ἐκάστω δε δύδοται ἡ πανέρωσις τοῦ Πνεύματος προς το συμφέρον ekasto de didotai e phanerosis tou pneumatos pros to sumpheron

  But the manifestation of the Spirit is given to every man to profit withal

### **ACKNOWLEDGMENTS**

"We know that in everything God works for good with those . . . who are called according to his purpose" (Rom 8:28). The difficulties that were met in a previous topic and which led to the present one were intended to provide me with the joy and the blessing of studying, researching, and writing on temperament and spiritual gifts. It is a pleasure to acknowledge the following:

The Lord for his everlasting tender loving care and total understanding, and to whom all credit belongs;

My father and mother, Mr. and Mrs. Marquez Joachim, for their sacrifice in behalf of my intellectual growth;

Dr. Roy C. Naden for his inspiration and suggestion of this blessed research and his constant support as a chairman;

Dr. Wilfred G. A. Futcher for his unequalled availability, attention, and patience:

Drs. Selma Chaij, Robert J. Cruise, and John Youngberg, committee members, for their helpful input:

Dr. Clifton Keller and Mike Khaler for their unforgettable help in the storing and treatment of the data;

Mrs. Joyce Jones for her editorial expertise and encouraging attitude;

Pastors and members of churches, deans, teachers, and students of schools for their cooperation and lending support, and;

Members of my household for limitless reasons.

May the blessing of this study be shared by as many as possible. If it brings fruit everlasting, its very ultimate purpose will have been reached.

#### CHAPTER I

# INTRODUCTION

Historically, temperament and spiritual gifts have been viewed as the offspring of separate disciplines, namely, psychology and theology. As recently as 1983, Timpe (1983) attempted to limit "the integration of psychology and theology" (p. 21) put forth by "professional organizations, scholarly journals, and graduate programs whose explicit rationale is to facilitate integration" (ibid.). He also pleaded for this separation in order to maintain what he considered to be the traditional divergence of the aims, goals, methods, and linquistic conventions of the disciplines. "Traditional theology," he further argued, has "a vertical perspective. . . . Traditional psychology is horizontal in perspective. . . . . Psychology's method and focus have been empirical, while theology's has been existential" (ibid., pp. 21, 28).

Recent studies on temperament and spiritual gifts caused some writers to hypothesize that there is a relationship between the two. In support of the argument for the existence of such a relationship, Ferguson (1983) noted the contribution of several psychological procedures to the selection of missionaries (p. 25). He listed (pp. 25, 28) among those procedures, the <u>Taylor Johnson Temperament Analysis</u> (1977), the <u>Minnesota Multi-Phasic Inventory</u> by Hathaway and McKinley (1967), the <u>Maudsley Personality Inventory</u> by Eysenck (1959), and the <u>California</u>

Psychological Inventory by Gough (1968). Githiga (1981) strongly supported Paul Tillich's opinion that "a theology which is influenced by psycho-therapy is a better one than a theology without such influence" (p. 27). He justified the use of psychology in pastoral care by "the fact that at present there is a give and take process between psychology and theology. . . . Today, there is no pastoral theologian who is worthy of the term whose work is not influenced by psychology or other behavioral sciences" (ibid., p. 27).

This study, in its search for a possible correlation between temperament and spiritual gifts, included the study of both psychology and theology. Being an empirical approach, it was clearly in the line of Ferguson and Githiga's position.

Interest in temperament originated at least twenty-four centuries ago with Hippocrates (c. 460-c. 377 B.C.). This interest was revived briefly six centuries later by another Greek physician, Claudius Galen (c. A.D. 130-c. 200) of Pergamum. But the work on temperament done by Hippocrates and Galen was too intriguing not to attract the attention of modern psychologists. Kant in the eighteenth century, Jordan and Wundt in the nineteenth, and Jung, Eysenck et al., all built upon the Hippocrato-Galenical four-temperament construct. Roback (1927) asserted "that the original theory is still intact" (p. 41). Irwin (1947), twenty years later, paid tribute to those "great ideas that have influenced the lives of millions of men" (p. 63). As Eysenck (1973) wrote as late as 1973, "Our own work may be more extensive, better controlled, and statistically more defensible, but it is recognizably a development

of ideas mooted [sic] all these centuries ago" (p. 11).

Like the concept of temperament, the concept of spiritual gifts is neither a new nor a dying one. Among numerous manifestations of spiritual gifts in the Old Testament, the gift of wisdom stood out clearly. Joseph's experience in Genesis 41 is "one of the first occurrences of this gift" (Yohn, 1974, p. 92). On subsequent occasions, God filled "all . . . gifted artisans . . . with the spirit of wisdom" (Exodus 28:3; 31:6). Concerning Bezaleel, he asserted, "I have filled him with the Spirit of God in wisdom, in understanding, in knowledge, and in all manners of workmanship" (Exodus 31:3). Solomon's very first judgment (2 Chronicles 1:11, 12) left no doubt that he was endowed with the gift of wisdom and his father was with the gift of music (2 Samuel 23:1; 2 Chronicles 7:6).

Likewise, Jethro's sound advice to Moses (Exodus 18:17, 18, 21-26) remains an eloquent expression of the gift of administration. By following this advice, Moses became a successful administrator.

These examples among many clash with the opinion expressed in The Holy Spirit and the Life in Christ, where the authors concluded "In the Old Testament the Spirit was experienced only by a few remarkable men" (Joint Theological Commission, 1953, p. 34). They continued, "This new age is characterized by the gift of the Holy Spirit, and His activity in the Church is in every way radically new as compared with the work of the Spirit in the Old Testament" (ibid.). Walvoord (1975), however, contended that "the enablement granted was sovereign, paralleling to some degree the sovereign bestowal of spiritual gifts in the New Testament period" (p. 74).

From the verb "to moot" meaning to argue, to debate, to discuss, according to Webster (1979).

In the New Testament, the doctrine of spiritual gifts was developed and expounded by Paul. It was picked up and transmitted through successive centuries from the second to the fifth, when it sank into oblivion. In the second century, it was verified by Justin Martyr (ca. A.D. 100-165) who reported that there were men and women in his time who possessed "gifts of the Spirit of God" (Hummel, 1978, p. 164; Piepkorn, 1971, p. 374). Irenaeus (ca. A.D. 130-200) classed many spiritual gifts of his time under the term charisma (Against the Heretics, V, vi, i in the Ante-Nicene Fathers, 1973, I, p. 531). Tertullian (ca. A.D. 160-200) also seemed to have reported extraordinary expressions of spiritual gifts (Hummel, 1978, p. 164). He entered the word charisma in the Latin theological literature as a transliterated loan-word with the general meaning of "gift" (Piepkorn, 1971, p. 375). Bishop Hillary of Poitiers (d. A.D. 367) quoted Paul's lists of gifts (On the Trinity, p. 61). During the fourth century, Chysostom in the East, and during the fifth, Augustine (354-430) in the West (De Trinitate) reported that the gifts could be . . . seen (Sweet, 1982, p. 80; Walvoord, 1975, pp. 244, 256; Hummel, 1978, p. 165; Wagner, 1979, pp. 25, 30; Ryrie, 1965, p. 114). However, after the fifth century, this doctrine was virtually ignored until the Reformation when it received some attention from John Calvin.

As Walvoord (1975) observed, "The Protestant Reformation . . . revived the doctrine of the work of the Holy Spirit" (p. 246). Unlike Calvin who argued that the miraculous gifts had disappeared to make room for a new power, namely the preaching of the gospel (edition of 1960, p. 1467), John Wesley saw a correlation between the manifestation of spiritual gifts and the spirituality of his

time (Harper, 1971, pp. 17-18) and taught the importance of the work of the Holy Spirit (Walvoord, 1978, p. 250).

The doctrine of spiritual gifts was reconsidered by John

Owen (1616-1683) in the seventeenth century and expressed in his

books The Holy Spirit, His Gifts and Powers (1954 edition), and

Discourse Concerning the Holy Spirit (1960). He commented: "We

have no longer prophets, or workers of miracles, nor gifts of

tongues" (1960, p. 96). The nineteenth century witnessed the publication of works such as The Holy Spirit or Power from on High. by

A. B. Simpson (1895), The Gifts of the Holy Spirit, by Vaughan (1894),

and The Doctrine of the Holy Spirit, by Smeaton (1889). As Walvoord

(1978) pointed out, "The nineteenth century . . . in its latter half

enjoyed a constant flow of books on the subject of the Holy Spirit

(p. 251) [and] . . . is a rich field of investigation in the eoctrine

of the Holy Spirit" (ibid., p. 259).

Until recently the theology of spiritual gifts created only mild interest among church members. Then Alexander Hay, who had, in his book, The New Testament Order for Church and Missionary (n.d.), "dealt favorably with all the spiritual gifts as early as in 1947" (Wagner, 1979, p. 27) revived an active interest in them among the contemporary students of the New Testament. In view of this rise in interest, Purkiser (1975) wrote,

John A. Owen's works, published by Johnstone and Hunter from 1850 to 1853, were edited by William H. Goold (Philadelphia: Protestant Episcopal Book Society, 1862 in 4 vols; reprinted in London by the Banner of Truth Trust, 1965, in 16 vols.). Discourse on the Holy Spirit ov vol. III was written in 1674. The Spirit of God as the Author of Spiritual Gifts was published by Nathaniel Mather in 1693. See also Rees (1915, pp. 191-94, 215) about Owen's Pneumatologia published from 1675 to 1693; Walvoord (1975), pp. 118-22); and Ryrie (1965, pp. 118, 122).

While Christians throughout the centuries have had and used spiritual gifts, it has only been in recent years that the Church has given much attention to this aspect of its ministry of the Holy Spirit [and] we have been made more aware of the importance of spiritual gifts by the very confusion and misunderstanding that has grown up around them. (p. 16)

# Statement of the Problem

Empirically developed inventories for both temperament and spiritual gifts exist, e.g., Guilford-Zimmerman Temperament Survey (1949). Minnesota Multiphasic Personality Inventory (Hathaway & Mckinley, 1967), Taylor-Johnson Temperament Analysis (1977), LaHaye Temperament Analysis (LaHaye, 1979), Thorndike Dimensions of Temperament Questionnaire (1963-1966), Humm-Wadsworth Inventory (Humm & Humm, 1934-1960), Eysenck Personality Inventory (Eysenck, 1964), Temperament Inventory (Cruise & Blitchington, 1977), and Spiritual Gifts Inventory (Naden & Cruise, 1981). LaHaye (1977) proposed research that would eventually reveal what relationship, if any, exists between temperament types and spiritual gifts. The titles used by two authors of studies on a related subject suggest the possibility of such a relationship. Ole Christian Hallesby's Temperament and the Christian Faith (1962) and Tim LaHaye's Spirit-Controlled Temperament (1966a) both deal with the relationship of temperament to Christian living. In one of his works, LaHaye (1977) shares his plan to "investigate the relationship between temperament and one's spiritual gifts" (p. 132). Surprisingly, it appears that as of the writing of this dissertation no empirical data have been collected and hence no research undertaken to test such a hypothesis, in spite of all these instruments.

<sup>&</sup>quot;One of the most ambitious, carefully prepared, and widely used of all psychological inventories" (Diamond, 1957) by 1957.

The idea of a relationship between temperaments and spiritual gifts raised several questions: What relationship, if any, would each of the nineteen spiritual gifts identified in <a href="The Spiritual Gifts">The Spiritual Gifts</a>
Inventory (by Naden & Cruise, 1981) have with one or more of the four temperaments identified in the <a href="Temperament Inventory">Temperament Inventory</a> (by Cruise & Blitchington, 1977)? Do sex and ethnic origin play any role in this relationship? What benefits would such a study bring to Christians? These are some of the questions this study sought to address.

# Purpose of the Study

This study proposed to investigate the relationship between four temperament types and nineteen spiritual gifts from the New Testament. This relationship was examined as it related to differences within and between both sexes and within and among three ethnic groups: Blacks, Caucasians, and Hispanics.

### Significance of the Study

In the last three decades, a significant number of publications revealed the pressing need for Christians to discover their spiritual gifts (McRae, 1976, p. 103; Wagner, 1979, p. 44; Adams, 1973, pp. 344-45). Many writings also stressed the need for one to understand his/her own temperament and that of others as a guide for behavior. "It is only when we learn to understand a person's temperament" argued Hallesby (1962), "that we can be fair and just to him. Then our thoughts and judgments regarding our fellowmen will be less harsh and our association with them easier" (p. 102). According to Hallesby (1962), it was imperative for one to have "a

knowledge of the temperaments . . . to understand what is caused by ill will and what is simply a manifestation of a temperament different from our own, and to judge the real evil of others more kindly since we will see that they have certain temptations that we know little about" (p. 103). LaHaye (1977), a writer of at least four works on temperaments [though he holds no graduate degree in psychology] saw the awareness of one's temperament as being helpful in vocational orientation, in interpersonal relationships, and in the search for a positive life (pp. 52, 53, 57). In the foreword of the 1982 printing of <a href="Transformed Temperaments">Transformed Temperaments</a> (1971) he wrote, "This new book . . . is the result of additional research into the subject and further counseling with people in trouble" (p. 8). It is also necessary for anyone who seeks "to understand the developing social, cognitive and personality structures of . . . the early years of life" (Feiring & Lewis, 1980, p. 66).

With a knowledge of both temperament and spiritual gifts, the individual Christian could better make the decision either to persevere in his/her current service in life or to look for another outlet where his/her temperament and spiritual gifts would contribute to the spiritual, moral, physical, and intellectual atmosphere of his/her milieu. This is especially true for a young person who is about to choose a career. In some cases, a simple adjustment may be all that is needed to ensure success. In others, however, a complete turn-around may be necessary. Stedman (1972) expressed it this way: "Your progress in maturity can be measured by the degree you accept the truth about yourself and others. . . . That truth will be shocking and healing" (p. 125). Buss and Plomin (1975) pointed out that

... men and women will usually take jobs that are at least not incompatible with their temperament patterns. If they are temperamentally unsuited for the job the outcome will be a strain that is easily identified as personal unhappiness, dissatisfaction, inefficiency and discord. (p. 208)

Lallaye (1977) asserted that

once a person diagnoses his own basic temperament, he is better equipped to ascertain what vocational opportunities he is best suited for, how to get along with other people, what kind of wife to marry, and how . . . he can improve the effectiveness of his life. (p. 52)

It was anticipated that the results of this study could enhance greater awareness among church members of the existence of spiritual gifts, of their distribution among all members, and of the helpful consequences of discovering and using them for the edification of the body of Christ. The existence of a correlation between temperament and spiritual gifts raised the issue of whether a person with a certain type of temperament should fill a given position related to a certain spiritual gift. It also addressed the ultimate issue of the incompatibility of temperament with specific religious functions. For instance, should an individual who is aloof, anti-social, and hostile to other people and their gatherings be added to the pastoral ministry? Does it make any difference? Should he/she be advised to concentrate on another profession in spite of his/her love and preference for this one?

These issues, of course, involved the pertinent and standing debate of nature versus nurture. This had to be reviewed in relation to the possible influence of the spiritual gift on temperament or vise-versa.

# Hypotheses

The following research hypotheses were formulated:

# Hypothesis 1

Among graduate students and church members, there is a significant canonical correlation between a linear combination of four temperaments—choleric, melancholic, phlegmatic, sanguine—and a linear combination of nineteen spiritual gifts: administration, apostleship, discernment, evangelism, exhortation, faith, giving, helps, hospitality, intercession, knowledge, leadership, martyrdom, mercy, mission service, pastoring, prophecy, teaching, and wisdom.

# Hypothesis 2

Among male Christian students and church members there is a significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Hypothesis 3

Among the female Christian students and church members there is a significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

### Hypothesis 4

Among Black graduate students and church members, there is a significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Hypothesis 5

Among Hispanic graduate students and church members, there is a significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Hypothesis 6

Among female Caucasian graduate students and church members, there is a significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Hypothesis 7

Among male Caucasian graduate students and church members, there is a significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Definition of Terms

Canonical correlation is a technique viewed as an expansion of the multiple-regression analysis. It seeks to compare two sets of variables in order to maximize the correlation between their linear combinations in the total sample (see Tatsuoka, 1978, p. 178).

Gift of administration is defined as the ability "to establish objectives and direct affairs for the larger geographic units of the Lord's work, to promote unity and enthusiasm; and to cheerfully accept responsibility for decisions made" (Naden et al, 1982, p. 21).

Gift of apostleship is the ability "to raise up and organize

congregations to ordain their leadership and to define and defend the faith" (ibid.).

Gift of discernment enables one "to identity: motives in people's actions; their primary source of motivation--the Lord or Satan; and the genuineness of appeals made to the church family" (ibid.).

Gift of evangelism is the ability "regularly and without difficulty: to lead people to surrender their lives to the claims of Jesus Christ; and to join in fellowship with the church" (ibid.).

Gift of exhortation enables a person "to express comfort to the hurting and problem-solving advice to the troubled; and to present encouragement and admonition to walk in the ways of the Lord" (ibid.).

Gift of faith is evident in a person who "has an unwavering confidence in the promises and providences, and will move ahead implementing plans for His kingdom even when the way is not clear" (ibid.).

<u>Gift of giving</u> is demonstrated by one who "gives consistently, generously, and spontaneously to those who need help" (ibid.).

Gift of helps or service is evident in a person who "consistently and happily gives assistance to any who need a 'helping hand'" (ibid.).

Gift of hospitality is evident in a person who "reaches out to offer friendship, food, and/or shelter to those who need such assistance (ibid., p. 22).

<u>Gift of intercession</u> is demonstrated by a person who "prays

regularly and at some length for the specific needs of others" (ibid.).

Gift of knowledge is demonstrated when an individual "is comfortable: discovering the Bible's teachings, especially as they relate to the plan of salvation; and answering Bible questions" (ibid.).

Sift of leadership is the ability to "develop and model local congregational programs of nurture and outreach; to deal with personal problems equitably; and to show insights that resolve organizational challenges" (ibid.).

Gift of martyrdom shows itself in one who "is willing to lay down his/her life willingly, without fear, in order to promote the kingdom of God" (ibid.).

Gift of mercy is defined as the attribute of one who "has a highly developed sense of compassion and willingly ministers to those in need, including those considered 'outcasts' by society" (ibid.).

Gift of mission service is evident in a person who "can leave friends and family to work in a foreign country, willingly adapting to a new culture in order to share the gospel" (ibid.).

Gift of pastoring is the ability to be "committed to the tender nurture of a congregation through preaching, home visitation, and one-to-one contacts" (ibid.).

Gift of prophecy is the gift to be "able to speak for God: to comfort and encourage the inquiring, the troubled, and the hurting; and to give instruction regarding the Christian's life and responsibilities" (ibid.).

Gift of teaching is that gift by which its possessor "presents and applies biblical doctrines and principles in any of a wide variety of teaching settings" (ibid.).

Gift of wisdom is demonstrated when an individual "is perceptive in giving practical counsel to individuals or groups, foreseeing the probable, practical outcomes of counselled courses of action" (ibid.).

The cholerics are "bold, thick-skinned individuals. Theirs is probably the most aggressive of all the temperaments, at least in social situations. They are often insensitive to the needs and feelings of other people. Generally abound with energy. They often appear as 'whirlwinds of activity' with no direction" (Blitchington & Cruise, 1979, pp. 15-16).

The relancholics are "anxious and emotional--tend to be high-strung--usually perform poorly under pressure. They have the most creative of all the temperaments; conservative and perfectionistic, moody and sensitive. They cannot tolerate criticism very well, and are usually highly sensitive to insults and slights from others" (ibid., pp. 17-18).

The phlegmatics are "calm and easy going--their temperament is the calmest and most peaceful of the four temperaments--usually work fairly well under pressure. Tactful and diplomatic. Good peace makers, flexible, they usually have little trouble adapting themselves to new people or procedures" (ibid., pp. 18-19).

The sanguines are "sociable and outgoing, friendly.

Talkative and responsive to others, distractable, they are easily

seduced and beguiled by whatever new object, event, or person comes into view--scatterbrained and often appear unorganized--usually buoyant, cheerful and expressive" (ibid., pp. 15-16).

## Outline of the Study

Five chapters make up this study. Chapter 1 has included the introduction, a statement of the problem, the need for the study, definition of terms, and the outline of the study.

The review of literature follows in chapter 2. It includes discussion of the four temperaments as defined by the <u>Temperament Inventory</u> (Cruise & Blitchington, 1977), the nineteen spiritual gifts as defined by <u>The Spiritual Gifts Inventory</u> (Naden & Cruise, 1981), and the question of the relationship between them.

Chapter 3 describes the methodology of the research and spells out the type of study, the population and solicitation of subjects, the instrumentation (<a href="Temperament Inventory">Temperament Inventory</a> by Cruise & Blitchington, 1977 and <a href="Temperament Inventory">The Spiritual Gifts Inventory</a> by Naden & Cruise in 1981), information about the subjects, the procedure for collecting the data, the null hypotheses, and the statistical analysis.

Chapter 4 presents and analyzes the data; and chapter 5 includes the summaries, implications, and recommendations.

Appendices and a selected bibliography complete the report of this research.

#### CHAPTER II

#### REVIEW OF LITERATURE

## Spiritual Gifts

Meaning of the Word "Gift"

"Gift" has many meanings. Webster (1979) gave three definitions of interest to this study. One stressed the spontaneous and gracious aspects of gift: "something . . . voluntarily transferred by one person to another without compensation"; another simply added an adjective, defining gift as "a natural gift or endowment regarded as conferred"; a third equated gift to "some power, quality, or attribute." These three definitions provided information especially about the beneficiary of the gift, but only hinted at the spiritual dimension of the word.

The spiritual dimension is strongly underlined in the Bible. In the Old Testament, the Hebrew words that carried the idea of gift are <u>chen</u>, <u>chesed</u>, and <u>ruach</u>. <u>Chen</u> (grace, human favor, God's graciousness to men, free unmerited favor) "never rises to the heights of the New Testament doctrine of <u>charis</u>; indeed the theological equivalent of <u>charis</u> in the Old Testament is <u>chesed</u>.

. . . [Here] the roots of the doctrine of grace are found" (Furness, 1966, p. 30).

<u>Ruach</u> (breath or breathing, metaphorically . . . prevailing influence), which occurs 378 times in the Old Testament, approximates

the word <u>charisma</u> when it means "the mysterious power possessing men and producing great feats of strength, qualities of leadership, wisdom . . . especially the gift of prophecy" (1bic., p. 99).

According to Hummel (1978), <u>charisma</u> appears only twice in the Greek translation of the Old Testament (p. 119) and scholars who used the word <u>charisma</u> "have not taken the word from their source [The Septuagint] . . . but from the construction Webster has put on it" (Laurentin, 1978, p. 4). Piepkorn (1971) affirmed that "the vocable <u>charisma</u> was not common before the New Testament. Occurrences that clearly antedate the New Testament are difficult to find" (ibid., p. 370).

The New Testament writers used no clear equivalent of the English word "gift." As Ervin (1968) put it, "The first thing that catches the attention of the student of the Greek New Testament is the absence of the word 'gift' in the Greek text . . [a] fact that the translators of the English text have noted by italicizing the word" (p. 111). He added that the translation of the word "gift" is "open to question" (ibid.). The words that result in this translation are primarily charisma, pneuma, doma (and their derivatives), diakonia, energema and phanerosis. Considerable space is spent here on the etymology of the first two words which are considered more important to this study than the others.

Some authors claimed that when <u>charisma</u> appears in 1 Pet 4:10, it is a distinctly Pauline expression. Except for the one occurrence in Peter's epistle, it occurs only within the Pauline circle (Hummel, 1978, p. 119; Sweet, 1982, p. 76; Griffiths, 1979, p. 15; Piepkorn, 1971, p. 370; Purkiser, 1979, p. 17). Paul used

it sixteen times and Peter once in a passage very much like Paul's writings.

The relation between <u>charisma</u>, <u>charis</u>, and <u>charismata</u> was clearly explained by Griffiths (1979): "<u>charisma</u>, the commoner word . . . derived directly from <u>charis</u> . . . means grace. Thus the result of grace (<u>charis</u>) is a spiritual gift (<u>charis-ma</u>). In the plural form it is <u>charisma-ta</u> meaning the many results of grace" (p. 13).

Laurentin's (1978) translation was similar. For him, <a href="https://charisma">charisma</a> may be translated "free gift" because it is a word derived from <a href="https://charis.org/ch

Piepkorn (1971) made a remark worth noting about the possible origin of the word <a href="mailto:charisma">charisma</a> in the New Testament. He said that <a href="mailto:charisma">charisma</a> was probably coined by St. Paul by linking the verb <a href="mailto:charizomai">charizomai</a> (to please) with <a href="mailto:charis">charis</a> (grace), the cognate verb <a href="mailto:charizomai">charizomai</a> (being at least as old as Homer (p. 370). Laurentin (1978) further explained that the root <a href="mailto:charis">charis</a> connotes joy as the verb <a href="mailto:charizomai">charizomai</a> (to please) is combined with <a href="mailto:charis">chari</a> (joy) (p. 8). If <a href="mailto:charis">charismai</a> (to please) is combined with <a href="mailto:charis">chari</a> (pie) (p. 8), Gangel, 1975, p. 8), <a href="mailto:charismailto:c

The word charisma contained, according to Godet (1889), "every concrete product in which grace is embodied" (p. 55). Kinghorn noted that "when the New Testament speaks of spiritual gifts it usually uses charismata" (p. 21) which for Purkiser (1979) was the (emphasis supplied) word, the New Testament "special word ('Principal word,' said Walvoord, 1975, p. 165) for spiritual gifts" (p. 16) in that it stands for "beauty, charm, attractiveness . . . favor, kindness, and gratitude as felt on the part of the receiver" (ibid.).

For Gangel (1975), this word <u>charisma</u> carries three separate ideas: God's gift of salvation, a general gift of grace or love and a specific endowment of spiritual ability. He claimed that the idea of grace in the connection between this word and its root <u>charis</u> is the proper basis for understanding how God gives the gift to His people. Following this line of reasoning, Griffiths (1979) emphasized the acceptance of <u>charismata</u> as a condition without which men are not yet Christians (p. 15) and Gee (1972) cautioned: "the slightest thought of personal merit in this respect . . . is completely ruled out" (p. 78).

In Laurentin's (1978) estimation, Paul chose the word charisma as a reaction to or substitute for pneumatikos used by the Corinthians in stressing inspiration. Charismata helped him to put the accent back on God's gratuitousness. If for Kinghorn, Purkiser, and Walvoord, charismata is the word par excellence for the expression spiritual gifts, Piepkorn (1971) saw it as "an unhappy choice among the available words. . . . " For him, pneumatikos might have been more appropriate (p. 386). What is there in pneumatikos to compare it to charisma? Here Gee (1972)

answered by saying that the word <u>pneumatikos</u> in 1 Cor 12:1 and 1 Cor 14:1 does not lend itself to the translation "gift." It means spirituals, not spiritual gifts. He conceded, however, that the translation "gift" can be justified by the presence of <u>didomi</u> (to give) in 1 Cor 12:7, 8 and the word <u>charismata</u> in 1 Cor 12:4, 9, 31 (p. 77). He seemed to mean that Paul used the word <u>pneumatikos</u> in 1 Cor 12:1, as a quote from the Corinthians to which he proposed <u>charismata</u> as a better choice (1972, pp. 77, 78). According to this view it was as if Paul was saying that over against this <u>pneumatikos</u> one has been talking and boasting about (<u>peri de ton pneumatikon</u>, <u>adelphoi</u>), there are varieties of <u>charismata</u> (<u>diaireseis de charismaton</u>). That interpretation gives a negative connotation to the use of <u>pneumatikow</u>, at least as far as its use by Paul is concerned.

Among the many commentaries on the translation, Thomas (1978) saw in pneumatikos only one of the five words translateable spiritual gifts ("spirituals," more accurately "spirits," or "Holy Spirit manifestations"). For another commentator, Hummel (1978), "spirituals" can be rendered either "spiritual gifts" or "those who possess spiritual gifts" (p. 127). According to another, Griffiths (1979), it may not actually mean "spiritual gifts" in a particular context but, as the context seems to demand, "concerning the inspired [persons]" (p. 16). Fransen (1971) preferred to attribute to pneumatikos the idea of "created grace . . . the whole man . . . totally renewed by the gift of the Spirit" (p. 52), while Hoyle (1929) opted for "brought by the Spirit" (p. 53). Neighbour (1974), in yet another interpretation, posited that "spirituals" of

1 Cor 12:1 "describes specific capacities . . . by the Holy Spirit" (p. 21). Walvoord (1975) thought that pneumatikos directs attention to the Holy Spirit [pneuma] (p. 164). It suggested to Piepkorn (1971) something additional to the Spirit [pneuma-tikos] (p. 377). It was also conceived (as was charismata) as a distinctively Pauline word. It occurs twenty-six times in the New Testament but is only listed twice by another author (1 Pet 2:5) (Hummel, 1978, p. 119). Pneumatikos is placed in Rom 1:11 as an adjectival modifier to charisma with which it combines to form the expression charisma pneumatikon, "spiritual grace" (ibid., p. 371). Piepkorn even saw a synonymous relationship between charisma and pneumatikon (p. 377) if not an identity (p. 371).

Another New Testament word for "spiritual gifts" is  $\underline{domata}$  which, according to Griffiths (1979), shared the root  $\underline{do}$  with "four of the five New Testament words translated 'gifts', the root  $\underline{do}$  (of  $\underline{doreo}$  meaning 'give') . . .  $\underline{doron}$  occurring nineteen times;  $\underline{dorea}$  eleven times and  $\underline{dorema}$  twice" (p. 13). The ending -ma stands for "the result of giving," namely "a gift," and -ta for the results of giving gifts (ibid.).

In Griffith's perspective, apostles, prophets, evangelists, and pastors/teachers may themselves be described as gifts (domata) of the ascended Christ to His saints (p. 16), while <u>charismata</u> could describe "various edifying activities or functions exercised by individuals" (ibid.). Hummel (1978) concurred seeing in each case of  $domata{o}$  (gift) a person to help prepare all the members of that community for ministry and maturity (p. 119).

The next word to consider is diakonia (English "deacon"). It

describes what gifts the Spirit makes possible, namely various ministries (MacGorman, 1974, p. 28). It stands for a broad category of spiritual gifts and several ministries (ibid., p. 33).

Thomas (1978) found the translation "varieties of effects" in <a href="mailto:energemata">energemata</a> (1 Cor 12:6) meaning operations which "focus upon the miraculous things wrought whenever spiritual gifts are operative . . . " (p. 32). For Godet (1889), the term <a href="mailto:energemata">energemata</a> (operations) denoted the powers realized in God (p. 191). Yet for Hummel (1978), it meant "working" (p. 128). Piepkorn (1971) bound the three words <a href="mailto:charismata">charismata</a>, <a href="mailto:diakonia">diakonia</a>, and <a href="mailto:energemata">energemata</a> in a "triadic relation of kinds of service <a href="mailto:diakonia">(diakonia</a>) . . . to Christ, with operation <a href="mailto:energemata">(energemata</a>) to the Father and of <a href="mailto:charismata">charismata</a> to the Holy Spirit" (p. 377).

A last word is <u>phanerosis</u>, claimed by Thomas (1978) to be a new word for spiritual gifts as found in 1 Cor 12:7 (p. 32) (edastode de didotai e phanerosis tou pneumatos pros to sumpheron; But to each is given the manifestation of the Spirit for profit). <u>Phanerosis</u> denotes another aspect of spiritual gifts, the element of "display with the result that other lives are touched" (Thomas, 1978, p. 33). This etymology allows one better to appreciate the following definitions.

#### Definitions of Spiritual Gifts

The authors who defined "spiritual gifts" seemed to concur in their use of such adjectives as "specific," "special," "particular," and "supernatural" which they added to one of the nouns "ability," "capacity," "attribute," "enabling," "endowment." Perhaps this betrayed a common concern for a distinctiveness that is difficult to

express. For instance, Hummel (1978) defines "a spiritual gift [as] a favor bestowed, a particular manifestation within the Christian community" (p. 119) and dorea as "a person to help prepare all the members for their ministry (see also Thomas, 1978, p. 30; Sweet, 1982, p. 76) and maturity" (p. 112). Hunter (1971) saw a spiritual gift as "primarily the free, forgiving love of God in Christ to sinners and the operations of that love in the lives of Christians . . . [or] divinely conferred endowments" (pp. 17, 89). Wagner (1979b) seemed apologetic in describing his definition of a spiritual gift as "a special attribute given by the Holy Spirit to every member of the body of Christ according to God's grace . . . for . . . use in the context of the body" (p. 42) as "tight and economical." McRae (1976) repeated and polished his earlier definition to transform "a divine endowment of special ability for service upon a member of the body of Christ" to "an ability to function effectively and significantly in a particular service as a member of Christ's body, the church" (pp. 18, 22). For Kinghorn (1976), "a spiritual gift refers to a supernatural enabling of the Holy Spirit which equips a Christian for his work of service and ministry" (p. 20). Later in his book he stated, "a spiritual gift is a supernatural ability or capacity given by God to enable the Christians to minister and to serve" (p. 22).

After giving his definitions, Naden (1982) cautiously touched an apparently controversial point when he distinguished two kinds of abilities.

Maybe we could say that a spiritual gift ministry is serving others, using one's DEDICATED talents or gifts at the direction of the Spirit, and through His enabling power. These gifts and

talents may include, (1) abilities possessed from birth and/or (2) those bestowed at or after the New Birth at the direction of the Holy Spirit. (1:9)

This statement opens the discussion on the relationship between spiritual gifts and natural talents. Are they the same? While no author seemed to believe that spiritual gifts and talents are identical, confusion still existed. To verify this statement it is sufficient to note the excessive emphasis of these authors who answer in the negative.

One of them was Hesselgrave (1980).

The world speaks of talent, abilities, "know-how," competency, and so forth. Talents and abilities are often referred to as "natural talents" or "native abilities" . . . talent, ability, and expertise are not to be confused with the spiritual gifts . . . it must be stressed here that talents are neither the same as, nor are they substitutes for, spiritual gifts. There is the real danger of recruiting on the basis of "abilities and expertise." (pp. 111, 112)

While Orjala (1978) rejected the identification of spiritual gifts with natural talents, he modified this by adding "though they may be related" (p. 34). Ervin (1968) wrote flatly "the gifts of the Spirit (charismata pneumatika) are not natural talents. They are supernatural manifestations of the Holy Spirit" (p. 233). Kinghorn (1976) concurred: "Spiritual gifts differ from human talents, only Christians can receive spiritual gifts" (pp. 21, 22). Likewise, Purkiser (1975) conceded a difference between true spiritual gifts (p. 20) and talents. Walvoord (1975) saw an "evident contrast between spiritual gifts and natural gifts. . . . Spiritual gifts pertain to the spiritual birth of Christians rather than their natural birth—to his new nature rather than his old . . . [they constitute] a supernatural gift bestowed" (p. 167). Laurentin (1978) strongly asserted that "human talents are not adequate for

spiritual ministry" (p. 30), and Neighbour (1974) addressed an emotional appeal for maintaining the distinction: "My heart aches when I think of thousands of dear Christians who have not understood that practicing their earthly talents in church work is totally foreign to exercising grace-given 'spirituals'" (p. 22). He concluded his appeal by writing: "We have missed the teachings of the scripture if we think that spiritual gifts refer to using talents for the glory of God" (p. 22). Ervin (1968) distinguishes spiritual gifts from the natural by equating them to "supernatural manifestations of the Holy Spirit" (p. 233), and Walvoord (1975) contended that a "gift is not a demonstration of what man can do even under favorable circumstances, but rather it reveals what God can bestow in grace" (p. 167).

Some of these authors conceded a relation, if not an equivalency: Orjala (1978) thought they could be related but not necessarily (p. 34); Neighbour (1974) opened the door for the Christianization of talents in adding, "True sometimes the talents and the gifts may coincide" (p. 33). Purkiser (1975), after distinguishing spiritual gifts from natural talents or "gifts" inherent in an individual temperament or personality, added immediately, "There is a close relationship between them. Spiritual gifts often function through natural faculties" (p. 14).

After wrestling with the relationship between the realm of spiritual and natural gifts, Webster (1979) admitted a strong possibility for the conversion of a natural talent to a spiritual gift, Naden's position. But Webster (1979) hastened to add, "God does not always guide in terms of natural abilities. Talent is not the ultimate

indication of what the Lord wants you to do" (p. 79). Griffiths (1979) went even further stating that "the sovereign God may well give to His servants from their mother's womb natural abilities which, when surrendered, sanctified and transfigured by spiritual blessings, can be effectively used to God's glory" (p. 70).

#### List of Spiritual Gifts

According to MacGorman (1974, p. 34) and Naden (1982, 1:8), scholars did not agree on a list of spiritual gifts and have consequently proposed various schemes of classifications. To his double question as to the number and the categorization of spiritual gifts, Gangel (1975) replied, "There are as many answers as commentators" (p. 11).

MacRae (1976) gave what he terms a "complete" list. It had sixteen gifts divided between speaking gifts and serving gifts (p. 87). Gangel (1975) called his list of eighteen gifts "exhaustive" (p. 11) but offered "an optiona! suggestion for one or two more" (ibid.). However, Wallenkampf (1978) listed twenty "not exhaustive but illustrative possible endowments" (p. 58). Orjala (1978, pp. 32-33) and Laurentin (1978, p. 38) arrived at the same number. For Griffiths (1979) even twenty was not "a single exhaustive list" (pp. 19021). Wagner (1979b) produced a list of twenty-seven gifts (pp. 259-63); he spoke of pastor-teacher as a hyphenated gift (pp. 76, 77) and of the missionary gift as "a hidden gift for a hidden people because hardly any book on spiritual gift discusses it or even acknowledges it as a gift" (p. 204).

Other authors used a much smaller number. Epp (1966) listed eleven gifts (pp. 81-91); Ryrie (1965) fourteen (pp. 185-91); and Walvoord (1958) listed sixteen (p. 168).

Barnes (1984) grouped the gifts into ministry gifts and miraculous gifts (pp. 21-24), Ford (1977) into speaking gifts, service gifts, and sign gifts (p. 82). Baird divided them into pedagogical gifts, supernatural gifts, and gifts of special communication (MacGorman, 1974, pp. 34-35). Beet (1892) also saw three series but they were intellectual gifts, gifts conspicuously miraculous, and gifts connected with tongues (p. 215). Orjala (1978) categorized them in primary, secondary, and ministries (pp. 32-33). Findlay's division was made up of the spirit working through the mind, the spirit working in distinction from the mind, and the "spirit working in supercession of the mind" (in MacGorman, 1974, p. 34). MacGorman himself proposed a fourfold division: gifts of the intelligible utterance, gifts of power, gifts of spiritual discernment, and gifts of ecstatic utterance (p. 35).

This study has used the list from <u>The Spirital Gifts Inventory</u> (Naden & Cruise, 1981). The author of this inventory purposely omitted the gifts of "healing, miracles, tongues, interpretation of tongues, celibacy, voluntary poverty, and exorcism . . . so spectacular or

lword of wisdom and word of knowledge.

<sup>&</sup>lt;sup>2</sup>Faith, healings, powers, prophecy, and discerning of spirits.

<sup>&</sup>lt;sup>3</sup>Kinds of tongues and interpreting of tongues.

Administration, apostleship, discernment, evangelism, exhortation, faith, giving, helps, hospitality, intercession, knowledge, leadership, martyrdom, mercy, mission service, pastoring, prophecy, teaching, and wisdom (Naden & Cruise, 1981, p. 11).

obvious that those who have them do not need help in recognizing the fact" (p. 11). The first four of these "spectacular" gifts appeared on most other lists (MacRae, 1976, p. 87; Gangel, 1975, p. 11; Ryrie, 1965, pp. 85-91; Griffiths, 1979, pp. 19-21; and Orjala, 1978, pp. 32-33). However, many of these lists excluded the gifts of mission service, martyrdom, and leadership included in the <u>SGI</u>. Others omitted the gift of hospitality (MacRae, p. 87; Ryrie, pp. 85-91; and Gangel, p. 11).

Is it possible that some modern writers on spiritual gifts found a problem with mission service and the related gifts of martyrdom and hospitality? Could it be that, like Smith (1976) who reported about the missionary situation, they considered those gifts as reserved for those individuals or situations "in profound crisis in both practice and theory"? (p. 7; see also Wagner, 1979b, p. 204 "The Gift of Missionary"). It may be that these writers wanted as short a list as possible. A short list is easier to read and to remember but if it fails to include all the gifts, it has defeated its very purpose. If a list were to include the abilities common among gifted Christians, e.g., musicianship, singing, film producing, radio programming, and public speaking, the more helpful and the more satisfactory the list would be.

#### Gift Bestowal

If natural abilities were given at "the mother's womb" as Griffiths put it, when was the "spiritual gift" given? Hesitancy characterized the treatment of the theme of the bestowal of a gift as evidenced by scholars' use of words that expressed doubt such as "probably," "possibly," "may," and the like. Barnes (1984)

used two of these expressions in the sentence: "It is possible that we receive spiritual gifts at the new birth even though we may not become cognizant of them until sometime afterwards" (p. 19). If one possesses a spiritual gift "it is most probable that he received it at new birth as a part of his spiritual inheritance" (p. 19). Walvoord (1975) contended that although the Scriptures give "no clear answer . . . [we can] infer that spiritual gifts are bestowed . . . at the moment of new birth . . . even if these gifts are not immediately observed or exercised. Accordingly, spiritual gifts probably attend the baptism of the Holy Spirit" (p. 166). Naden (1982) followed the same path and placed the origin of a gift "at or after new birth at the direction of the Holy Spirit" (1:9); when it came after the new birth it was because God was answering a particular need (ibid.); Gangel (1975) was less precise: "The Holy Spirit may choose at times to give a gift later in one's ministry" (p. 13); and Gee (1972) refused to commit himself to any point in time: "Gifts . . . can be bestowed suddenly at any point in the believer's experience" (p. 70). The next question is how one discovers a gift.

#### Discovery of a Gift

The question arises as to whether a Christian should seek to discover his/her gifts, and if so, how? Some people answered bluntly in the negative to the first question and thereby dismissed the second. Others wondered and remained confused. A third group, however, responded in the affirmative, considering the discovery of a gift as a step of paramount importance, to be taken by all

means by all members of the Christian community. The development of these three positions is most interesting.

## Three positions about gift discovery

Very few denied the need to discover one's spiritual gifts, but when such a denial came from someone of the stature of Gene Getz, it assumed considerable importance. Getz in 1974 saw no need for discovering a gift (Wagner, 1979b, p. 45). Yet, according to Yohn (1974), a church which shares this view is like "a multi-millionaire living in poverty"; it "lives in spiritual poverty, unaware of the potential that God has given . . . unaware of the gift of the Holy Spirit" (p. 126). More alarming was the statistical study reported by Yohn indicating that up to 80 percent of all Christians live in ignorance of their gifts, a condition he blamed on the many problems that plague the church, among which are dissension and "curse" (pp. 46-49).

Other students of spiritual gifts questioned the possibility of identifying a particular ability, though when pressed to choose they acknowledged "that a gift is recognizable" (Rogillio, 1971, p. 110). This hesitation was especially evident when it came to the hidden gift (Wagner, 1979, p. 204)--"the gift of missionary."

The third group that saw the Christian's discovery of his gift(s) as an integral and, perhaps, the most important part of the Christian life includes authors such as McRae and Wagner (McRae, 1976, pp. 103, 104; Wagner, 1979b, p. 44; see also Murphy, 1975, p. 327). Wagner (1979b) termed this search a "top priority" and McRae (1976) "a higher priority in the life of a believer," "a

high priority for every individual Christian," "the way to perceive God's will." Yohn (1974) made this requirement compulsory for every one (p. 126), and Schramm (1982) perceived it as essential for the gifted person to find "space to grow" and "for others to help him" (pp. 42, 56). According to Gangel (1975), the Holy Spirit wanted us to know what our gifts are as those gifts "may be latent, waiting for activation" (p. 13). Tidwell (1982, p. 256) and Purkiser (1975, p. 22) suggested that the church help in this discovery, but did not specify how.

Wagner (1976, p. 74) proposed five courses of action to an individual who wants to discover his/her gift: (1) explore the possibilities, (2) experiment with as many as possible, (3) examine your feelings, (4) evaluate your effectiveness, and (5) expect confirmation from the body. Gangel (1975, p. 13) gave four guiding questions: (1) What do you enjoy doing? (2) What has God been blessing? (3) How have others encouraged you? and (4) What has the Holy Spirit told you? Laurentin (1978) suggested three other questions: "(1) Am I developing more competence in this area? (2) Do opportunities open up for me to exercise this gift? and (3) Are my efforts producing good results in the lives of others?" (p. 112). However, in attempting to find their spiritual gifts many Christians do not know if they should attempt to find more than one or even whether or not every believer has at least one.

## Distribution of Gifts among Believers

Ford (1977) said that God decides what gifts the body needs and assigns one or more gifts to each believer to meet that need

(p. 82). This scheme which includes every believer he asserted, carries "revolutionary implications" (p. 77). Most writers, if not all, shared this idea of inclusiveness but to differing degrees (MacGorman, 1974, p. 31). For some, no believer is left out (Griffiths, 1979, p. 9; Orjala, 1978, p. 31; McRae, 1976, p. 32; Barnes, 1984, p. 13); for others, all believers are the recipient of at least one gift (Gangel, 1975, p. 87; Kinghorn, 1976, p. 25; Unger, 1974, p. 135; Ryrie, 1959, p. 196; Walvoord, 1975, p. 166; Purkiser, 1975, p. 21).

It seems to be agreed among New Testament writers that Christians must take what God gives them; "dissatisfaction with God's gift underscores spiritual immaturity and our failure to trust His wisdom and grace" (Kinghorn, 1976, p. 25). Wagner (1976) found an individual "pathetic . . [who is] trying to exercise a spiritual gift he or she does not have. It usually ends up in utter frustration, like trying to write on a blackboard with your toes" (p. 73). But accepting God's gift whatever it is is the equivalent of accepting one's spiritual job description (Orjala, 1978, p. 31). This concept led to an examination of the purpose of spiritual gifts.

#### Purpose of Spiritual Gifts

There was an apparent consensus on the reasons for the presence of these gifts in the church. They were and are given for the edification and the spiritual growth of the church (Gangel, 1975, p. 9). McRae (1976) considered them of paramount importance for "the efficient functioning of the entire body and the equipping

of the saints for the work of service and the building up of the body of Christ" (p. 130). For Schramm (1982), "gifts are given in order to fill a need . . . for the body of Christ . . . [to] be strengthened" (p. 79; see Arn, 1982, p. 168; Ryrie, 1959, pp. 195-96; Gee, 1972, p. 26; Sanders, 1970, p. 134; Yohn, 1974, p. 143; Barnes, 1984, p. 18; MacGorman, 1974, p. 31; Sweet, 1982, pp. 77-78; Hummel, 1978, p. 170). For Gangel (1975, p. 9), "the discovery of a gift and its use are intimately related." To Stedman (1972), utilization of spiritual gifts "should be the most important thing in the world of a Christian" (p. 67). Strauss (1976), talking about the use of a gift, repeated Paul's expression to Timothy (2 Tim 1:6): "Fan it into a flame! . . . Possession of a gift demands its practice" (p. 50). Concerning God's attitude toward the gift and the giver, he added, "Once God gives a gift, He never takes it back, 'for the gifts and calling of God are without repentance' Rom 11:29" (ibid.).

Many evangelical writers on gifts found in the use of a gift a <u>sine qua non</u> for its development. Murphy (1975) even wrote, "One matures in the use of his gift, usually the beginning manifestation of that gift will scarcely be discernible to the believer himself" (p. 326). After assenting that "to minister those gifts is to enter a whole new dimension of exalting possibility,"

Stedman (1972) put it this way: "Gifts need to be exercised just as talents do and practice tends to make more perfect in one just as much as in the other" (p. 51). Schramm (1982) added, "The good news is that we are most fulfilled when we are using our gift for others" (p. 74). Purkiser (1975) reiterated that positive

aspect: "The use of spiritual gifts is a source of deep and abounding joy, the greatest sense of fulfillment possible for the Christian heart" (p. 20), and further, When "gifts are used for others, the giver also benefits" (p. 75). Yohn (1974) described the need to exercise the gift as "essential. If you don't use your gift, you experience frustration and defeat in life. You forever wonder why God has put you on earth" (p. 21). Approaching the subject from a slightly different angle, McRae (1976) declared, "We stand responsible today for the use of the . . . opportunities that have been entrusted to us . . . We are also accountable for how we have invested the gift entrusted to us. . . . As one has received a special gift, employ it in serving one another, as good stewards of the manifold grace of God (1 Pet 4:10)" (ibid., p. 30). Wagner (1976) added that God is going to ask each believer how he has used his gifts (p. 75). Laurentin (1978) concluded: "Open yourself to God as a channel for his use" (pp. 108-9).

#### How to Use the Gifts

Hummel (1978) saw love as the most important gift (p. 117). Without love, "charismata can be distorted," asserted MacGorman (1974, pp. 14, 16; see also Orjala, 1978, p. 34; Walvoord, 1975, p. 167; Gangel, 1975, p. 90). Baird (1980, pp. 53, 54), Schramm (1982, p. 81), and Beet (1883, p. 213) in extolling love call it the greatest of the gifts, thus identifying it as a gift. Other writers did not consider love the greatest of gifts, but simply as the only fruit of the Spirit, the remaining eight of the ninefold list

being expressions of love (Sweet, 1982, p. 81; Walvoord, 1975, p. 167). Spiritual gifts "supplement this fruit" according to Hummel (1978, p. 117). According to Gee (1972, pp. 70-71) and Wagner (1979b, p. 88) love is not a spiritual gift but a fruit.

All the writers agreed that the gifts are for use. "There is nothing in Scripture, reason, or experience to make us believe that the gifts of the Spirit are not for today--everyone of them" (Gee, 1972, p. 18). Gee further commented: "Nothing is of more vital importance concerning the establishment of New Testament Christianity than the full return of every one of the supernatural gifts of the Holy Ghost. . . . We must have gifts" (p. 85).

A year after Gee, Adams (1973) "declared requisite for Christian counselors a program for the discovery, development, and use of gifts" (p. 345).

#### Summary

The Old Testament recorded manifestations of spiritual gifts but within a relatively restricted group. Chen was one of the Hebrew words that approximates the New Testament charis.

Chesed, however, was the closest to the concept of "gift," or charisma. Charisma, the word seemingly preferred by Paul to denote spiritual gifts, was, apart from one occurrence in a Petrine text, exclusively used by him. It entered the Latin Literature through St. Augustine in De Trinitate as a transliterated loanword. Another word that was said to belong exclusively to Paul's repertory is pneumatikos—according to commentaries, Paul would have used charisma first over and against the pneumatikos (of the Corinthians) derivative of pneuma of which the Corinthians were

fond. Putting aside this insight, pneumatikos was considered at times synonymous and at times identical to charisma. Dōmata was also used to signify the results of giving. The other words that would be translated "spiritual gifts" are mainly diakonia (deacon in English) for service and ministry; energemata (ergon, work) that carried the connotation of energizings, or workings; and phanerosis that conveyed the idea of "display" with the effect of touching other people's lives. This survey introduced various definitions of spiritual gifts, most of them treating this expression as meaning a God-given endowment for service in the context of the furtherance of His cause by the members of the church, His body.

There was no consensus either as to the number or classification of gifts, the lists being different with different authors. It was generally accepted that every Christian has received a bestowal of gifts. When, nobody knew clearly, but it was believed that the bestowal of a gift accompanies the new birth or occurs subsequently. Although there was no concensus on the need to discover one's gift, those who encouraged its discovery agree that it must also be put into practice, as a failure to do so could result in frustration and problems in the church and in the life of the individual members.

one's gifts had not God always provided the means for their use. All excuses fail for "to each one is given the manifestation of the Spirit with a view to profit" (1 Cor 12:7). The bestowal of a gift is for profit and for each one, i.e., for each Christian. This bestowal takes place once the new nature becomes a reality. Sooner or later the baptized individual experiences a new set of

endowments and/or the Christianization of what used to be his/her natural talent for service. The choice either to Christianize talents or to give additional or new ones always lies with God (Phil 2:13).

A natural talent does not fade away even if it does not become a spiritual gift. It serves a purpose perhaps just like tentmaking supported Paul in his preaching of the Gospel. A natural gift in the hand of a dedicated Christian supports his ministry and is a spiritual tool if it continues to be exercised.

By trying honestly to become operative in the body of Christ, all Christians will see their gifts emerge. God can also bestow instantaneous spiritual gifts in answer to a specific need at a specific time and place. He did so for the construction of the first tabernacle in the Old Testament; and in the New Testament by giving, through Mary, the unique gift of Jesus. God makes sure that a gift is bestowed at the right time through the channel of His choice.

But would it be that His gifts are, as LaHaye (1977) contended, "conferred upon every one . . . through our temperament"? (p. 132). The following section takes up a review of temperament before going into the possibility of relationship between it and spiritual gifts.

## Temperament

## Historical Background

Drawn from a plethora of books and a wealth of literature on temperament, this review attempts to present research applicable to a twentieth-century Christian audience. It begins with

the genesis of the four-temperament construct and moves to its resurgence from the eighteenth century. It explores its relevance to modern psychology, its relationship to a much newer theory—the extraversion-intraversion theory—and, finally, its relation—ship to some segments of society, in particular to sex, race, and religion.

Hippocrates, the putative father of the four-temperament humoral theory, found the way to this theory already paved. The number "four" that fascinated the Ancients so much was declared the canonical number by Empedocles' decision (Irwin, 1947, pp. 45-64; Roback, 1952, pp. 41-42). This number was used for the elements in the physical world, and likewise, by virtue of the doctrine of opposites, applied to the qualities of these elements and to the humors produced by their mixture in the body.

Alcmaeon of Crotona used to teach that a body could be said to be in perfect health only if it had a mixture (<u>crasis</u>) of the elements in perfect balance (<u>eucrasia</u>). Any disproportion or preponderance resulted in disease (dyscrasia).

On the basis of these precedents. Hippocrates built his theory that man "enjoys the most perfect health when these elements are duly proportioned one to another (Jenes, 1959, p. 11). But the paucity of such health ("exact proportion," "just temperament," writes Coxe in Irwin, 1947, p. 53) brought Galen to hail the normal temperament as an approximation of the perfect blending. This lack of completion gave rise to the sanguine, melancholic, phlegmatic, and choleric temperaments, according to the predominance of a given element in the mixture. Buss and Plomin (1975) denied anything

"magical about the number four" (p. 231) and Brock (1929) affirmed that "the beginnings of the humoral theory long antedated the Hippocratic era" (p. 9). However, they joined those who recognized in Hippocrates the pioneer in the explanation of the differences in human behavior; an activity Irwin qualified as "semi-scientific" (Irwin, 1947, p. 45) and Eysenck (1973) as "scientific" (p. 4), and which is useful both to "newcomers to this field . . . [and to] the modern observer" (p. 11). Exactly how this ancient doctrine affects modern psychology and helps in the present study is now considered.

## Resurgence of the Four-Temperament Doctrine

# A categorical system or the Kantian era

From Galen to Kant only spasmodic writings appeared on temperament, and these few contributions had practically no impact. But Kant's textbooks, Anthropologie, published in 1798, caused a decisive resurgence of the Hippocrato-Galenical doctrine of the four temperaments. For almost two centuries Kant remained the unchallenged promoter of the theory of four compartmentalized temperaments as expressed in his motto, "There are four and only four simple temperaments" (Eysenck, 1960, p. 17) and demonstrated by a simple diagram (see fig. 1).

Eysenck, making constant references to this diagram, interprets or explains it in different ways. In 1969, he called it "independent, separate and unrelated pigeon-holes" where "there are no compound temperaments, e.g., a sanguine-choleric," but "only four temperaments, each of which is simple, and it is impossible

	Strong	Weak
Quick	Choleric	Sanguine
Slow	Melancholic	Phlegmatic

Fig. 1. Kant's conception of simple and exclusive temperaments.

to conceive of a human being which combines them in any way" (Eysenck & Eysenck, 1969, p. 13).

In 1970, Eysenck rehearsed Kant's "categorical point of view . . . where mixtures or admixtures were admissible" (p. 35). In 1973, he spoke of this diagram as "a conception of types . . . unchangeable and pure. . . . A person belongs to one of these four groups; he cannot change his position, and there are no intermediate degrees" (p. 5). Roback (1973), a staunch adherent to the ancient nomenclature, branded "Kant's emphatic pronouncement . . . which considers any one who claims to be a mixed type . . . a perplexing problem to be given up as a bad job" (p. 53).

Nevertheless, Eysenck's findings fell in line with the psychologists who objected to the idea of pure types (Downey, 1923, p. 22). Diamond (1957) likewise advocated a combination of types allowing for the classification of an individual according to his one strongest temperamental disposition" (p. 195). In contrast, Roback (1927, 1952) was one of the rare psychologists who had frowned upon the "outcry that . . . all have a little of everything and . . . that pure types are a fiction" (p. 222).

Modern psychologists tended to agree with Buss and Plomin

(1975) who viewed the "four temperaments [as] . . . clearly insufficient to account for the many patterns of personality" and for the "more recent theories of temperament . . . compatible with modern science" and with "human reaction to classification in a precise and simple way" (p. 184; see also Fordham, 1953, p. 45). The large number of expressions indicative of this reaction included statements of classification ranging from "some sort of mixture of temperament" (Hallesby, 1962, p. 11) to an "indefinite number of individual temperamental shades" (Kretschmer, 1925, p. 265). Ar a whole, the Kantian era brought a return to the study of temperament. In that sense any modern theory on this subject owes its existence to Kant.

#### Definitions

It may be advisable to consider the way modern students of temperament defined it. If Hallesby (1962) thought "we all know something about what it means" (p. 8), this is not true of the man in the street. A psychologist concluded: "the expression 'temperament' has for us no well-defined meaning, but it is a heuristic notion the breadth of whose field of reference we have not yet determined" (Kretchmer, 1925, p. 259). Perhaps this is no longer so. Two years after the book <a href="Physique and Character">Physique and Character</a> appeared, Roback (1927), in a survey of temperament, appealed for a definition of this term to "Alcmeon of Crotona who attributed disease to the disturbance of the equilibrium of the elementary qualities" (p. 42). Metzner (1978), half a century later, gave a similar definition for "temperament comes from the Latin temperare [temperamentum] said Hallesby, 1962, p. 8] to mix or blend in clear proportions
. . . [and] is historically associated with the medieval theory

of the four humours which needed to be blended harmoniously and in the right proportions, for health and a balanced temperament" (p. 6). Roback (1927, 3rd ed., 1952) defined temperament as "the sum total of one's affective qualities as they impress others" (p. 155). Therefore temperament makes an impression upon others. Diamond (1957) rightly penned that the following definition of Allport in 1937 was a careful one because it "refers to the characteristic phenomena of an individual's emotional nature . . . susceptibility . . . customary strength and speed of response, the quality of his prevailing mood" (p. 95). Then he quoted Adler coining "style of life" to designate temperament (ibid., p. 197). A "very useful phrase," he commented (ibid.). The expression "style of life" seems in fact a very useful and also a happy one. Recently Simonds and Simonds (1982) defined temperament "a stylistic way of behaving" (p. 359), long after the book Developmental Psychology Today had used a similar expression in an attempt to define temperament (p. 30). "Temperament refers to the behavioral style of the individual . . . the how of behavior . . . the rate at which they [individuals] work, the mood they express, the readiness with which they shift to a new activity, the ease with which they approach a new situation or playmate" (p. 30). Irwin (1947) pointed out that even modern psychologists could not get away from the original routine of four temperaments. He showed how Warren took a definition from McDougall who further attributed it to Hippocrates and Galen (p. 62). This constituted an additional reason for Hallesby (1962)

Thirty consultants contributed to the writing of this book and Richard L. Roe was its publisher.

to conclude that if the Hippocrato-Galenical "expressions have survived, so have the four types" (p. 9). As Roback (1927) remarked, "in one sense it may be said that the original theory is still intact" (p. 41). How was this possible until modern times?

#### Modern Theories

Furneaux Jordan, a century after Kant, conceptualized two exclusive types, extraverts and introverts, the description of which made him "the first . . . to give a relatively appropriate character sketch of the emotional types" (Jung, 1923, pp. 191-97; see Jordan, 1896, pp. 26ff.). But Jordan's partiality became apparent through these sketches and this made him vulnerable to criticism, especially from Jung, by way of argument ad hominem. He was caught censoring and depreciating the extravert as an individual "given to . . . censoriousness, depreciatory judgment on all." Here Jordan fell under his own condemnation. His introvert was the more impassioned, reflective, trustful individual, appreciative of others; while the extravert was unimpassioned, incapable of new ideas (ibid.), a sort of a "caricature," a "one-sided conception" (Jung, 1923, pp. 201, 203) that appeared very displeasing to Jung (Eysenck, 1960, p. 20).

Jordan, by conceiving and describing unmixed types, walked in the path of Kant and his predecessors. Wundt also built on Kant's theory with his "two principles in the individual's reactivity of the affects: one . . . refers to the strength, the other to the speed of change of a person's feelings" (Eysenck, 1973, p. 18). Wundt's proposition as arranged in fig. 2 showed that not many people are "easily characterized as cholerics, melancholics,

sanguines, or phlegmatics" but there is a "transfer of interest from the quadrants to the coordinates . . . from a categorical to a continuous typology . . . from a qualitative to a quantitative measurement" (Eysenck, 1960, p. 18). The sanguine and the choleric are quick, changeable. The phlegmatic and the melancholy are just the opposite: slow and unchangeable. With the substitution of extravert for the changeable, and introvert for the unchangeable, the modern theory in its descriptive stages was born (Eysenck, 1973, p. 5), thereby making Wundt the father of continuity in the study of temperaments (ibid.).

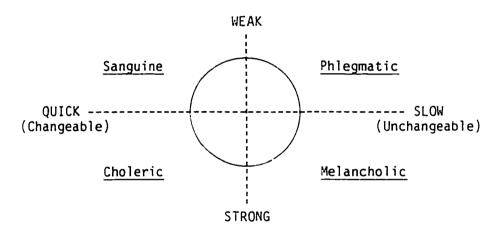


Fig. 2. Wundt's proposition regarding the speed of change and the strength of temperaments.

Gross, to whom the expressions extraversion and introversion were unknown, came very close to the same concept expressed by Wundt with his classification of individuals in terms of primary and secondary functions. By substituting the word process for function, it is possible to understand Gross's classification in this definition of Eysenck (1960). "Individuals differed according to the length of the secondary process--introverts had a long,

extraverts a short secondary process" (p. 6). In this view, the introvert spends much time thinking before making a decision, where the extravert does not think enough (Eysenck, p. 21; 1973, p. 6; cf. 1969, p. 20).

The widespread use of both expressions—introversion and extraversion—was attributed to the pen of Jung (1956, p. 54; 1923, p. 412) who used them to designate interaction between behavior and experience where a "behavior brings result[s], and results influence behavior, [to] close the circle of an individual's destiny" (1956, p. 54). Extraversion or introversion is a question of typical attitude, a habitual reaction that becomes a style of behavior (Jung, 1923, p. 99).

For Jung in 1923, there existed two types with clear cut differences (pp. 412, 413). Later, he (1956) argued that they can "seldom be observed in their pure state . . . and [are] not at all easy to establish" since "experiences teach man that he cannot give free reign to his nature" (p. 54). The Jungian extravert sacrifices the subject to the benefit of the object (1923, p. 412). His inner life succumbs to the "external necessity"; "his entire consciousness" and his "decisive determination" yield to the outer world (1923, pp. 417, 420; De Laszlo, 1959, pp. 189, 216). He expresses his emotions in action and association with others (Laird, in Eysence, 1971, p. 32; Cox, 1968, pp. 116-19). Optimistic, with a tendency toward superficiality, possessing a love for good impression and a hatred for longliness (Fordham, 1953, p. 32), the extravert values the material and immaterial aspects of the outer world; he

seeks social approval and he likes people as well as things (Eysenck & Eysenck, 1969, p. 21).

The Jungian introverts on the contrary keep everything to themselves. The subject is all-important over and against the object (Jung, 1956, p. 54; 1923, pp. 412, 567). Their entire consciousness looks inward. Since they enjoy loneliness with their own thoughts and opinions, and as they dislike society (Fordham, 1953, pp. 32, 35), their destiny . . . is conditioned more by their inner selves (De Laszlo, 1959, pp. 183, 184, 186).

Jung was criticized on many fronts, not for his character sketches, but for plagiarism. Eysenck (1960), in dismissing Jung's concepts as lacking originality, went on to trace the use of the terms extraversion and introversion in Europe for several hundred years before Jung (p. 37). He showed that Jung owed his psychological theories based on type division to Jordan and Otto (p. 128). Eysenck and Eysenck (1969) attributed his use of libido tendency to Freud (p. 20). Likewise, most of Jung's assertive ideas were attributed to the "arduous scientific research" of the Dutch, Heymans, Wiersma, and Brugman (Eysenck, 1973, pp. 7, 13) and to the work of Jordan in 1896 and of Gross in 1902 and 1909 (idem., 1960, p. 23). Eysenck also noted that Jung's classification of introverts as thinkers, rationalists, and system-workers, and of extraverts as positivist, fatalist, determinist, irreligious, and skeptic was borrowed from William James (ibid.).

Eysenck (1973) went further. Not only did he insist that Jung's concepts and his use of those terms "are not original" (p. 7), but he held Jung responsible for many of the flaws in the

theory of extraversion and introversion (ibid.). He found the existence of this confusion in the minds of many people unfortunate (ibid., pp. 12-13). And, he exclaimed,

From the point of view of scientific study his contribution has been largely a negative one. By allowing his mystical notions to overshadow the empirical observational data he had done his best to remove the concept of personality type from the realm of scientific discourse. . . . Psychologists will have to learn . . . that the personality types of extraversion and intraversion owe very little to Jung, and the sooner this message reaches psychological textbooks, the better. (p. 13)

In <u>Theoretical and Methodological Issues</u> (1970), Eysenck spoke of the existing confusion in the "peculiarities . . . he [Jung] sought to define as temperamental . . . " and which are in fact nothing but disposition (ibid., pp. 18-20).

However, Eysenck gave credit to the "putative" but contested father of the theory of extraversion-introversion for its widespread acceptance (Eysenck, 1973, pp. 13, 128, 140; 1971, p. 124), for the suggestion "that the two ends of the extraversion-introversion continuum were related respectively . . . to the psychastenic hysteric" disorders (Eysenck, 1967, p. 37), and for his "attractive literary embellishment" (1973, p. 7).

From Eysenck's perspective, extraversion is the positive state, the state <u>par excellence</u>; conversely, introversion is the negative state. Extreme introversion represents a defective state by the very fact that the introvert is caught up in his thoughts, paralyzed and possessed by them, incapable thereby of emotion, cold, expressionless, unfit for the life of action and social intercourse (Eysenck, 1970, p. 23). The extravert in this comparison is the individual who possesses to a large degree an

antidote--an extraversion hormone--to the intravertive cortical inhibition (ibid.).

The Eysenck Personality Inventory (EPI) by Eysenck and Eysenck (1964) was conceived on the basis of Jung's theory of extraversion-introversion but it was inspired by the Maudsley Personality Inventory (MPI) by Eysenck (1959). The EPI was administered to 600 subjects of each sex. This experiment yielded three groups, namely, neurotic introverts, neurotic extraverts, and the normal groups. Eysenck (1969) declared that in it he followed the threefold approach of the Dutch school by using the psychometric work, the experimental approach and the hypothetico-deductive method to obtain his categories and establish differences in behavior (see fig. 3).

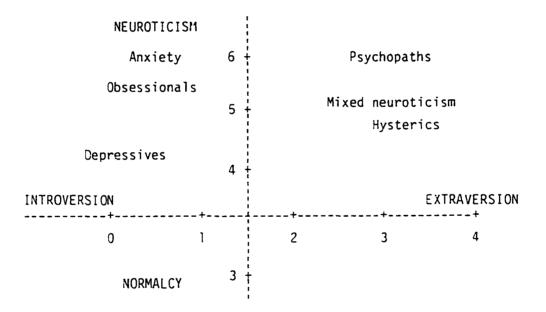


Fig. 3. Eysenck's introvert and extravert categories based on Jung's theory. Introversion and extraversion partake of neuroticism. The normal group differs significantly from the neurotic population. (See Eysenck, 1970, p. 140.)

Finally, since Jung, the terms introversion and extraversion have developed many connections and meanings according to the interest, the social milieu, and the system in which they are being considered. Thus it may be safe to consider these connections and meanings as part of what Fordham (1953) called endless misunderstandings, based on the formulation of antagonistic and conflicting philosophies resulting from constant comparisons between one type and another, from undervaluing one in behalf of another (p. 30).

From this overview of theories of the extravert and introvert, which of the two types is better? The introvert is depicted as essentially egocentric; "egotistical" is the word used by Fordham (1953, p. 33), "dull," unadaptable (ibid., p. 40), preferring his loneliness to society and gatherings which he dislikes (ibid., p. 33). His interest recedes toward the subject (De Laszlo, 1959, p. 262) as "he withdraws from external objects ["withdrawal of interest in life," said Downey, 1923, p. 13], he holds them (especially us) at a distance and refuses to become too involved with them . . . loses all touch with the world in which he lives . . . becomes entirely unrelated to it" (Cox, 1968, pp. 116-17).

Superficiality seems to characterize the description of the extravert--sociable, confident in unfamiliar surroundings, the extravert invests his interest in events, people, and things and builds his dependence on them (Fordham, 1953, pp. 20, 30). Cox (1968) said that he may become so engulfed in other people and things that he "takes on the color of his environment, whatever it may be" (p. 117). He feels so well-adjusted to the world (Fordham, 1953, p. 40) and he is so interested in anything and

everything that he meets others half-way and thereby offers the impression of being superficial and only interested in making a good impression (ibid., p. 32). In fact "intellectual analysis charges [him] with every possible design, subtle aim . . . [and] mental reservation" (Jung, 1923, p. 203) including the charge of superficiality and insincerity (Fordham, 1953, p. 33), and the charge of being loquacious, incapable of new ideas and of opening new paths but quick to follow, seize, apply, carry out (Jordan, 1896, p. 201). Yet everyone should endeavor to discover which side he belongs to if "only to find out how the particular knowledge could be exploited to the advantage of all concerned" (Roback, 1927, p. 116).

Other models have their problems also. One of them, Elizabeth Duffy's (1949) two-dimensional model, represented the major aspects of human temperament (Diamond, 1957, pp. 127-29), and offered a dimension of intensity (very active to inactive) and a dimension of directional reference (poles: approach and withdrawal). "The problem with this model is that, not unlike Jordan's extravert and introvert theory a descriptive trait name is not related unambiguously to one dimension or the other and should be dropped from scientific usage" (ibid., pp. 127, 128).

Instead of Duffy's activity continuum, Stagner (1948) proposed excitement (for very active) at one end and depression (for inactive) at the other; for the approach-withdrawal dimension he substituted pleasantness and unpleasantness. He said that his scheme corresponded fairly well (Diamond, 1957, p. 129) to Hippocrates'

traditional four-temperaments: the Sanguine, Choleric, Phlegmatic, and Melancholic.

Fouillée (quoted in Roback, 1952) also had two divisions which he later expanded to four in order to match the fourtemperament types. The resulting four divisionswere: for the sanguine, sensory quickly reacting; for the nervous [melancholic], the sensory with an intense reaction; for the choleric, the active with a quick, intense reaction; and for the phlegmatic, the active with a slow and weak reaction (p. 77). Making one dimension sensitive and active, Jastrow (quoted in Roback, 1952, p. 85) found these interesting combinations with the original four temperaments: for the sanguine type, sensitive-ACTIVE; for the melancholic, SENSITIVE-active; for the choleric, SENSITIVE-ACTIVE; and for the phlegmatic, sensitive-active (where the capital letters are used for the predominant element).

The table of temperaments by Elsenhans is worth noting (see table 1).

In the context of the four-temperament types, positive and negative sides are presented for each. But, depending on the preference of the writer, some of the presentations appeared to reveal a disconcerting partiality leaving the impression of favoring one temperament over the rest.

The Four-Temperament Types

# Positive aspects

The cholerics are depicted as strong, firm, practical, and active, as well as promoters of activity. They are thus cut out for leadership positions, where motivation and productivity are needed.

TABLE 1
TEMPERAMENTS ACCORDING TO ELSENHANS

Temperament	Excitability of Affective Life	Form of the Effective Course		Motivation Force of
		Mobility	Strength	the Feelings
Sanguine	light	alternating	weak	Slight the man of moods Considerable the fickle person
Melancholic	deep	persistent	strong	Slight the visionary hypochondriac Considerable the idealist of action
Choleric	light	alternating	strong	Considerable the vehement man of will Slight the excited man of feeling
Phlegmatic	deep	persistent	weak	Considerable the cold-blooded, tough minded Slight the indifferent, apathetic

Note: Found in Roback, 1952, p. 83.

The sanguines are charming, tender, sympathetic, and open to new ideas. They have such perseverance and such a gift as speakers that they "can sell refrigerators to the Eskimos" (LaHaye, 1977, pp. 58, 61). Considered by Roback (1927, 1952) "the most amiable of the quartet" (p. 544), the sanguine "has the most possible connotations and associations in mass-mind ideas and ideals, kind and affectionate (Metzner, 1979, p. 42).

The phlegmatics are, like the cholerics, practical individuals. But they are also very careful and usually succeed as problem shooters and solvers (Roback, 1927, p. 141).

The melancholics hold in aversion anything superficial and inconstant: they do things conscientiously and thoroughly. One can count on their faithfulness in friendship. As persons of self-denial, they take no joy in sin and worldly living, but find meaning in a life of personal sacrifice. "The richest of all temperaments" (Hallesby, 1962, pp. 40, 104), with the highest IQ, melancholy is the temperament of the gifted and the perfectionist. Great composers, artists, musicians, inventors, dedicated educators, philosophers, theoreticians, theologians, scientists, outstanding Bible characters (e.g., Moses, Elijah, and John the apostle) belong to it. "The greater the genius, the greater the predominance" (LaHaye, 1977, pp. 75, 76).

Without any effort, one can see the emphasis put on the melancholy temperament with its array of feats. Very little indeed is left for the other three temperament types. A consideration of the negative sides shows the same partiality.

### Negative aspects

The choleric is the temperament of the selfish, unsympathetic, harsh person (Hallesby, 1962, pp. 72, 105). The choleric individuals are despisers of their fellowmen and of their ability. They are said to be jealous, rarely religious, and cruel to the point of being the most dangerous people in society, since they stop at nothing to reach their end (ibid., p. 69). They are "usually disliked because of an irascible disposition which is apt to make underlings . . . uncomfortable" (Roback, 1927, 1952, p. 544). Ardent and excitable, they are "burning with adrenalin, energy and overbrimming vitality" (Metzner, 1979, p. 43).

The sanguine is rather inconstant, superficial, unstable, unsteady, and easily molded. This temperament is alien to real conviction. The sanguine individuals have no time for prayer, for reading, or meditation. Notoriously disorganized, they are compilers of unfinished jobs and losers of keys.

The phlegmatics are cool, indifferent, unemotional, and slow. Considered the laziest of all (Hallesby, 1962, pp. 77ff.), they are easy-going and indecisive, but can be stingy and stubborn. They are "popularly regarded as unemotional" (Metzner, 1979, p. 43).

As for the melancholics, they are the most self-centered of all. They drift easily into morbid mental conditions (Hallesby, 1962, p. 104). Depressive (Roback, 1927, 1952, p. 141), they are suspicious and peevish, and find it difficult to forgive an insult (LaHaye, 1977, p. 76). "Pessimistic . . . [they] expect the worst to happen" (Metzner, 1979, p. 44). They are "too ineffectual . . . to possess character in any prominent degree" (Roback, 1927, 1952, p. 544).

It may be very hard for any individual of the sanguine or choleric type not to question the veracity of the characteristics and/or motives attributed to them. For example, if the cholerics are such dangerous and irreligious individuals, how can they avoid going around with a major complex, a feeling that something is wrong in their nature that requires a drastic change?

LaHaye and others seemed to extol melancholic above the other temperaments. Thus, it would seem that individuals of other temperaments should seek to emulate the heroes of the melancholic type. Yet reality shows that not all the heroes of the Bible or of society were melancholic. A student of the Bible finds it difficult to see how John the apostle could have belonged to the melancholy temperament while he was called a son of thunder. Either at some point he completely changed to become the beloved disciple or he was never the kind of person suggested by this description of this temperament. Furthermore, characters such as Paul, Peter, and others who also failed to conform to this description are considered among the most inspiring of characters.

The constitutionalists—in the temperament debate—usually assumed <u>ipso facto</u> that temperament is stable (Feiring, 1980, p. 74). The opposite position proposed a chameleon type of person where "all four temperaments may be made use of at different times by the same person" (Roback, 1952, p. 68). After analysis of "such extremely opportune changeability," Roback (1952) treated it as "a serious personality defect" (p. 69). This chameleon can be considered, however, as a temperament of its own—a combination of the celebrated quartet rather than a negation thereof, as Hallesby

(1962) seemed to indicate by the expressions "people without temperament," "stiff and unnatural," and "like birds with clipped wings" (p. 99). However, Roback (1952, p. 61) posited that a fluctuating temperament by virtue of which a man is disposed to change from joyousness to sadness without special cause is not only conceivable, but is sometimes encountered in experience.

Rorschach (1921, 1942, in Diamond, 1957, p. 262) went as far as describing temperaments as "tendencies to certain ways of acting or perceiving . . . not to be thought as opposites, but as two quite different forms of mental activity." These tendencies which he termed introversive and extraversive can both be found at the same time in one person (ibid.).

### Temperament Relationships

The comparison of temperaments, often considered an explosive exercise because of its "difficulties and dangers" (Hallesby, 1962, p. 102), is also a healthy activity likely to increase as time goes by and as the emphasis on the importance of the study of temperament for human individuality (Diamond, 1957, p. 4) continues. The knowledge of one's temperament helps one "to understand what is caused by ill will and what is simply a manifestation of a temperament different from our own" (Hallesby, 1962, p. 103), and "to be fair and just . . . and less harsh . . . [in judging] the real evil of others more kindly . . . " (ibid.). In Stedman's estimation, accepting one's temperament is a question of maturity (1972, p. 125). For Buss and Plomin (1975), it is a "must" if "men and women [want] to take jobs that are at least not

incompatible with their temperament patterns," and to avoid "strain . . . personal unhappiness, dissatisfaction, inefficiency, and discord" (p. 208).

Aristotle's proposition (Rhetoric 2.21) "learn to know thyself" (gnothi seauton; see also Metzner, 1979, p. 21: "Man, Know Thyself") finds an echo in today's view of temperament which contends "a person [who] diagnoses his own basic temperament . . . is better equipped to ascertain what vocation opportunities he is best suited for and what natural weaknesses he must work on to keep from short circuiting his potential and creativity" (LaHaye, 1977, p. 57). Author of several books on the subject, LaHaye attributed to temperament "the number one influence on a person's life" (p. 53), i.e., on everything he does--his behavior, clothes, life-style, work, and study habits (ibid., pp. 95, 96). In addition to its influence on conscious lives, emotions, minds, will, and spiritual lives (Hallesby, 1962, p. 6), on "mood-coloring" (Kretschmer, 1925, p. 26), on the "social environment" (Buss & Plomin, 1975, p. 5), and on "marriage relationships" (Youngberg & Hessel, p. 1), temperament also acts as a determinant of job performance (Glennon, 1965, p. 25) and of choice of occupation and "vocational preference" (Buss & Plomin, 1975, p. 5).

If temperament is so important, what does LaHaye mean by his statements, "All temperaments are hopeless" (1971, p. 18) and "No temperament can be said better than another" (1966b, p. 23), and Blitchington and Cruise (1979) by their statement, "There are no better or worse temperaments, only different ones" (p. 1), or Roback (1973) by putting "all temperaments on an equal footing" (p. 551)?

Temperaments do cause different reactions if one is to consider allusions made by authors in the field to "people whose temperaments offer problems" (Jung, 1969, p. 392); to mood disorder of the melancholy, or psychopathic inferiority and moral insanity "of the sanguine" (Jung, 1957, p. 132); to a temperament vulnerable to anger, high blood pressure, heart pressure and attack, colitis, arthritis, kidney stones, gall bladder (LaHaye, 1977, pp. 156, 157); to the automobile metaphor for the extravert where the engine (activity) requires very strong brakes (Buss & Plomin, 1975, p. 184); to predisposition towards neurotic disorder in the introvert who conditions well and towards criminal behavior in the extravert who conditions poorly (Eysenck & Eysenck, 1969, p. 56); all seeking to establish that somehow the differences among the four temperaments have their bearing.

Roback (1927) noted the clear distinction made by

Nicolas Seeland between "strong or positive temperaments" and "weak
and negative temperaments . . . [where] instead of giving equal
weight to each of the temperaments he conceives a sort of hierarchy"
(p. 70). Roback (1927, 1952) answered that "any single temperament is apt to favourahigh or a low character" (p. 674) and again,
"Neither intelligence nor evolutional qualities enter into the
temperamental make-up of a person" (ibid., p. 156). Likewise,
Hallesby (1962) affirmed that "temperament has nothing to do with
one's moral living" (p. 9).

# Nature-nurture controversy

Any attitude towards temperament roots itself in one's philosophy of life and understanding of the nature of temperament.

The great issue is then: Is temperament inherited? If so, to what extent? All discussion is related to the long-standing issue of the nature-nurture controversy in which "heritability is a central issue" (Buss & Plomin, 1957, p. 230; Sheldon, 1942, p. 3). Any position faces the "danger of creating a wrong impression regarding the relative importance of heredity and environment, those two concepts that have so often split scholars into factions" (Sheldon, 1942, p. 3). Sanchez (1975) found no consensus over how far temperament is determined by genetic-endogenous factors and how far by the environment in which the individual develops (pp. 7-32).

The Encyclopedia of Psychology defined "heredity . . . [as]
the innate capacity of an individual to develop characteristics
possessed by its ancestors" (p. 136). In discussing heredity, it
stated that the nature-nurture controversy is often filled with
rhetoric and misinterpretations (p. 197). The terminology used
in this controversy involves terms such as heredity, temperament,
etc., and is by itself a fertile soil for "inevitable confusion,"
according to Eysenck (1973, p. 18). Adcock in his evaluation of
Thorndike's theory (1973, p. 154) shared this point of view.
Kretschmer (1925, p. ix) concurred, as did Aller in his introduction
to Kretschmer's work (1925, p. 259). And Youngberg and Hessel (1982,
p. 4) in their interpretation of the Taylor-Johnson Temperament Analysis
(1977) re-emphasized the existence of this confusion.

# The hereditarian position

Very few authors denied some "inherited basis" to temperament. Fewer argued that temperament is inborn and fixed for all. Lashley was one of them, and he claimed--on the basis of endocrine glands--to

have evidence in support of the inheritance of temperament (Roback, 1955, pp. 223, 325). Still others hastened to add that after it is "inherited . . . it is always with you. Your temperament remains relatively stable" (Blitchington & Cruise, 1979, p. 11). Some called upon Rousseau's supportive stand for the natural enfoldment of the hereditary good nature (Bigge & Hunt, 1980, p. 25; Roback, 1927, 3rd. ed., 1952, pp. 141-42).

LaHaye's writings are saturated with expressions such as "inborn traits . . . by the genes," "passed on by the genes," "arranged genetically," "born with, inherited from parents" (1977, pp. 6, 52), "traits . . . whether controlled or uncontrolled [that] last throughout life" (LaHaye, 1966b, p. 7), "part of the individual throughout life" (ibid., p. 104); all of which seem to indicate an adoption of the hereditarian position. Hallesby (1962) also held this position, defining temperament as "a distinctive stamp . . . inborn . . . permanent . . . from the cradle to the grave" (p. 103). Burton (1979) suggested that at least melancholy is hereditary (p. 39), while Linton (1978) theorized that philosophy, religion, and psychology must fit a temperament rather than temperament being changed by them (vol. 3, pp. 1-13).

Buss and Plomin's experiments on identical twins versus fraternal twins seemed supportive of the inheritance of temperaments (1975, pp. 16, 28, 50). Yet the authors weakened their conclusions by stating that "the identical versus fraternal twins differences in correlation—the hallmark of an inherited trait—was too large for temperaments to be attributed solely to inheritance" (p. 28ff.). They further commented with moderation, "The only evidence bearing

on the inheritance of temperaments comes from a handful of twin studies" (p. 16) that yielded "an established hereditary component" (p. 185). Then they added that "the difference . . . must be due to environment" (Eysenck, 1971, p. 391).

### The environmentalist position

A very small number of writers posited with John Locke that man was born neutral, a <u>tabula rasa</u>, a blank slate that will be written on by experience (Buss & Plomin, 1975, pp. 1, 2). "Man's nature is that he has no nature . . . environment is all. If there are stable individual differences, they are learned during childhood, during adulthood, or both" (ibid.). LaHaye (1977) frowned at the tenets of such a position (p. 54), and Hallesby (1962) argued that no normal person is born without temperament (p. 7). According to Jung (1956), being given a basic temperament at birth does not exclude environmental adjustment "due to experiences which teach a man . . . that he cannot give free rein to his nature" (p. 54).

Such expressions as "differences in temperament appear at the earliest stages of development" (Rothenberg, 1981, p. 292), "established in early childhood" (Diamond, 1957, p. 194), "very early in life" (ibid., p. 184), "in the first months in life infants display a predominant temperament" (<u>Developmental Psychology Today</u>, 1971, p. 30) suggested that the temperamental pattern was already there, but did not inform one of the time of its original appearance. It is only for individuation that Diamond (1967) gave a precise time (p. 184). He continued by asserting "the importance of very early experience in

modifying original disposition" (ibid.). He did not state at what point temperament begins to exist, neither did he delineate unambiguously the relative importance of endowment and of social environmental factors in forming the child's later temperament (ibid., p. 30). These statements did not make it clear that temperament is innate.

Cameron (1978) called upon experimental results available to him to document his assertion that children's temperament is neither an inborn, immutable characteristic nor just a function of past experience, but a reflection of both (pp. 233-44).

If nature is all, education and admonition are likely to be like drops of water against the irreducible rock of nature, unless they are provided before birth or perhaps at conception. However, if nurture is all; everyone, when placed in the proper environment, has the chance and the possibility of temperament development.

### A third position: the interactive view

There was, however, an intermediate position. It attributed to inheritance only a certain slice of temperament. This position found its expression in terms such as "basis," "set of," and the affirmation that "Heredity and environment are . . . interwined in any individual . . . [and] cannot be separated" (Buss & Plomin, 1975, p. 14). Cautiously put is the statement: "There is a good possibility that inheritance plays some part" (Melvin & Defleur, 1971, p. 133). More cautious still was talking of a "display of a predominant temperament . . . which may persist relatively unchanged" (Herbert Birch, in Melvin & Defleur, 1971, p. 30), creating "degrees of compatibility or incompatibility" (ibid., p. 31). The

Encyclopedia of Psychology (1981, s.v. Michael Rothenberg) reads:
"Temperament . . . can be modified somewhat either positively or
negatively by an individual experience as he [the individual] is
maturing" (p. 292). How can experience and heredity interact in a
given temperament? The end result of their reaction is sometimes
called individuation.

As applied to temperament, the term individuation refers to the development of the individual personality in its differentiation from the collective norm (Jung, 1923, p. 561). Said Diamond (1957), "It reflects the importance of very early experience in its modification of original temperament" (p. 184). It happens in childhood, but also in youth, maturity, and old age (Hallesby, 1962, p. 104).

Buss and Plomin (1975) for whom "temperaments are not immutable" (p. 4) saw in individuation "the most irrefutable evidence for the strength of environment in modifying temperament" (p. 200). However while affirming the reciprocity of the modification, they recognized that "in the long run an intense environmental pressure cannot radically alter a temperamental disposition" (p. 4).

Supporting this position is Hallesby who believed that temperament "should be disciplined, modified, sanctified" (1962, p. 98), but not in servile imitation of someone else's temperament to the point of making "people without temperament . . . like birds with clipped wings" (pp. 98-101). Here Hallesby even scoffed at people who "look upon temperament as unchangeable . . . while it should be cured at all points when it is tempted to sin" (p. 32). In his mind, the control over temperament is a "can and must" (p. 32). "What is difficult [is] to find a happy medium"

(p. 98) between following one's temperament "naturally and happily"(p. 32) and training it, curbing it, disciplining it consciously"where it tempts to sin" (ibid.). As one can expect from Hallesby,such control can be achieved only "by our spiritual nature" (ibid.).

"Yes, temperament can be changed," affirmed LaHaye (1966a, 1982 printing, p. 8; 1971, p. 6) in an apparent contradiction of his initial position. At the same time he acknowledged the need to find a happy medium to avoid obliteration of the temperament. This transformation is true only for the Spirit-controlled temperament (LaHaye, 1971, p. 18, 1966a, 1982 printing, p. 126). The inborn temperament then becomes an old nature, synonymous to "the natural man," that seeks its satisfaction (LaHaye, 1966, p. 5). He felt that, as a whole, Christian writers consider temperament originally amoral but loaded with the potential to serve "either for good or for ill" (Hallesby, 1962, p. 7). It was moreover suggested that

Mature Christians whose temperament has been modified by the Holy Spirit often find it difficult to analyze their temperamental make-up because they make the mistake of examining the temperament theory in the light of their present behavior. It is easier to diagnose and classify an unsaved person . . . than a dedicated mature Christian. (LaHaye, 1977, p. 117)

LaHaye (1966b, 1982 printing) went on to identify this modification with "the unmistakable work of the Holy Spirit on the natural temperament of a person until it is almost impossible to see traces of the original temperament . . . just changed by the Holy Spirit" (p. 126), "no matter what one's natural temperament is" (ibid., p. 45).

Among other possible influences on temperament are race

and sex. Eysenck (1971) considered race an important factor in the formation of temperament. "The Negroes and, to a lesser degree, the Yankees are more extraverts than the British and the red men in the United States," he affirmed (pp. 26, 27).

Whether or not sex influences temperament is an unsettled issue. Jung (1923) opted for the negative (p. 413). Buss and Plomin (1975) concurred and saw a difference only in later childhood (p. 180). Diamond (1957) suggested that a difference exists but that the difference is blurred by society (p. 316). Buss and Plomin (1975) attributed any difference to gender role training (p. 156), and they punctuated their remarks with expressions such as "temperamental differences among children . . . submerged or masked, disguised" during socialization (p. 118), "manipulation, encouragement, challenge that modify the initial endowment" (p. 166). They clearly "deny inborn gender differences" (p. 182).

The results of an experiment conducted in 1980 on fifty-nine boys and girls over the first three years of age revealed very few or no sex differences (Feiring & Lewis, pp. 65, 66). The authors concluded that any subsequent difference is a function of socialization rather than temperament (ibid., p. 74) and emerges at an age at which gender role identity and training are being established (ibid., p. 73). This age for Buss and Plomin (1975) begins before four. Thomas and Hess (1970) saw no gender differences in children four months old, Wilhoit (1976) saw none in in infancy, and Persson and McNeil (1984), no differences among 160 children at six months, one year, and two years of age (pp. 710-14). According to Babladelis, Gerogia et al. (1983),

differences in temperament between men and women are assumed to be based on biological and/or socializing factors (pp. 111-23).

Finally for Tiger and Fox (in Buss & Plomin, 1975), "men and women behave differently because they are wired to do so . . . [since] innate gender differences were [supposedly] enhanced by early man's hunting behavior" (p. 169). LaHaye (1966) supported Diamond's position in that, for him, "a person's sex will affect his temperament." He gave as an example the fact that the hardest woman will weep at times, whereas some men will never weep" (p. 7). He (1977) argued that the opposite position is a result of the "technological sophistication of society" which causes "more frustration and misery than the world has ever known" (p. 23). He asserted belief in this difference by writing Understanding the Male Temperament (1977), of which the three different sections are titled "men," "masculinity," and "men--religious life" (see also the dedication of the book). Buss and Plomin (1975, p. 4) contended that "even the intense environmental pressure cannot radically alter the initial temperament"; on the contrary, interaction with the environment might accentuate temperamental differences.

### Summary

History attributes the first treatment of temperaments and their nomenclature to Hippocrates. Only recently did a revival of temperament study arouse interest in the subject.

Modern psychologists objected to the Hippocratic idea of a pure temperament but opt for a blending of temperaments where one element predominates with its strengths and its weaknesses. Some

authors recognized the immutability of temperament, taking its inborn nature to mean that it will remain almost inflexible from the cradle to the grave. Others took the opposite stand and argued that nurture is all-important and has the last word in the formation of temperament.

The majority took the interactive view. Temperament has an inherited basis but will lend itself to modification by outer influences. More than one Christian writer believed in the possibility of an almost radical change in the life of the individual who submits himself to the influence of the Holy Spirit. For them, religion transforms the amoral temperament from the old nature to one that is Spirit-controlled.

### CHAPTER III

### METHODOLOGY

This chapter deals with the type of study, the description of the population and sample, the instrumentation, the procedure, and the statistical analysis used.

# Type of Study

This study uses a canonical correlational research design to determine whether a relationship exists between one's temperament and spiritual gifts. Four temperaments, taken as a set, constituted the first set of variables. Nineteen spiritual gifts, also taken as a set, constituted the second set of variables.

### Population and Sample

The population for this study included Christian graduate and Seminary students attending Christian schools in the Great Lakes area of the United States in the Spring of 1984, and members of selected churches in the same area. The states included were: Illinois, Indiana, Michigan, and Kansas. The schools were selected only from the state of Indiana and from the state of Michigan. The churches were selected from all four states.

The schools were purposely chosen because of their religious orientation. Furthermore, all offer graduate and professional courses leading to degrees in Religion, Theology, and/or

Religious Education to both sexes regardless of ethnic group.

Descriptions of schools used in the sample may be found in appendix A.

The churches in this study were chosen because of their proximity to the researcher's residence and the facility in receiving permission to test members of the congregations. The list of these churches is in appendix B.

The size of the total sample was planned according to Maurice Kendall's recommendation in <u>Multivariate Analysis</u> (1975, p. 11) to have "at least ten times as many observations as variables." Since there are four temperaments and nineteen spiritual gifts this formula gives:

 $[(19 + 4) \times 10] = 230$  subjects per group.

In order to be more confident of the stability of the correlation matrix, a larger sample was sought, approaching fifteen times as many observations as variables, i.e.,

[(19 + 4) x 15] = 345 subjects per group

As it was planned to study six subgroups, (1) Female Blacks, (2) Male Blacks, (3) Female Caucasians, (4) Male Caucasians, (5) Female Hispanics, and (6) Male Hispanics, the number of subjects needed was between 6 x 230 and 6 x 345, i.e., between 1380 and 2270. In spite of the fact that approximately 2800 sets of instruments were distributed over a four-month period, only 1067 usable instruments were returned—38 percent. These 1067 responses are distributed according to table 2.

TABLE 2

DISTRIBUTION OF RESPONDENTS ACCORDING TO SEX
AND ETHNIC BACKGROUND

Ethnic Background							
Sex	Blacks	Caucasians	Hispanics	Other	Total		
Female	122	278	88	18	506		
Male	99	348	78	25	550		
Unidentified		1	1	9	11		
Total	221	627	167	52	1067		

Only the Caucasian group had enough males and females for a study within and between the sexes. The Black and the Hispanic groups do not provide a large enough population for the sexes to be treated and analyzed separately.

### Instrumentation

To measure effectively the four temperaments, the nineteen spiritual gifts, and their correlation, it was necessary to design or to select appropriate instruments. This study selected two such existing instruments. One was <a href="Temperament Inventory">Temperament Inventory</a> (TI) from Cruise and Blitchington (1977); the other <a href="The Spiritual Gifts">The Spiritual Gifts</a> <a href="Inventory">Inventory</a> (SGI) from Naden and Cruise (1981).

### Temperament Inventory

### Formation

In 1975, existing instruments to measure temperaments were judged to be too old by testing standards (Manners, 1975, p. 501). The need was then felt and expressed for a new and reliable

instrument that would integrate contemporary theory. In response to this concern, Cruise and associates developed in 1977 a Temperament Inventory. The Temperament Inventory, while retaining Eysenck's original four-temperament scale, follows Buss and Plomin in the rejection of the partitioning of the four temperaments and allows for scoring on each one of the scales, namely, choleric, melancholic, phlegmatic, and sanguine.

Temperament Inventory was administered to a nonprobability purposive sample of 1409 predominantly middle-class subjects, 1533 of whom were randomly selected "college students, teachers, salesmen, housewives, ministers, and social workers" (Cruise & Blitchington, 1980, p. 946). This sample came from Michigan, Iowa, Indiana, California, Canada, and the Southern states. It included members of the age group between eighteen and thirty-five years old with a practically even number of members of both sexes.

After a survey to identify 300 original items that would adequately measure temperament, and the elimination of inappropriate ones, 208 items remained and constituted the initial instrument. A simple method of scoring is used--corresponding to the "yes" or "no" answer to any item, a point is added to the score on the corresponding temperament.

Administered to a nonprobability purposive sample of 414 middle-class residents and graduate students of the Midwest states, the 208 items were reduced to 182 which, after factor analysis and elimination of items with factor loadings below .30, dropped to 127.

After another administration to an additional nonprobability purposive sample of 800 people, only 114 items of the initial

instruments were retained. Still a further administration to 2200 more subjects--now a total of 3409--brought the 114 items to the actual 80 items that constitute the final form of the Temperament Inventory. "Yes" and "no" are the only possible answers to the <u>TI</u>. This inventory can be filled out in twenty minutes and scored by the use of four stencils.

# Reliability

The alpha ( $\alpha$ ) reliability estimates for the four subscales were .84 for choleric, .88 for melancholic, .88 for phlegmatic, and .90 for sanguine.

### Validity

<u>Inventory</u> was evaluated by six judges. An item was eliminated if there was a consensus among these judges that it was not a relevant measure of temperament, not consistent with the definition of the particular temperament which it was intended to measure, or not carefully worded.

Construct validity was established by a factor analysis of the 80-item instrument. This analysis revealed the existence of the four factors hypothesized as components of temperament. It indicated that the four factors provided the most comprehensive and concise explanation of the construct.

<u>Concurrent validity</u> was established by the use of the <u>Eysenck Personality Inventory</u> (<u>EPI</u>). However, the <u>TI</u> yields scores on four dimensions and <u>EPI</u> on only two. As a solution, a simple hypothetical relationship was proposed. This relationship is

illustrated in fig. 4 where the four temperaments are assumed to be polar opposites and their vectors assumed to bisect the angles between Eysenck's Extraversion and Neuroticism dimensions.

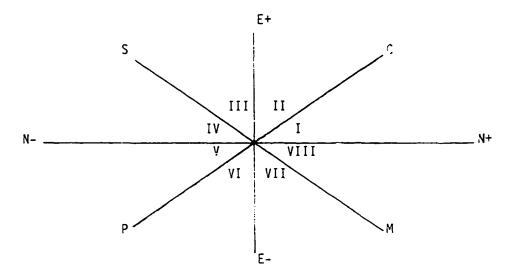


Fig. 4. Hypothetical relation between EPI and TI factors.

From fig. 4, it is clear that an extraversion score may be simply predicted from the four temperament scores as:

$$E' = C + S - P - M$$
.

Likewise, a Neuroticism score may be predicted as:

$$N' = C + M - S - P.$$

The product moment correlation between these predicted scores and the actual scores for E and N on the Eysenck's Inventory obtained by 1533 of the initial subjects were:

$$rEE' = .531$$
 and

$$rNN' = .622.$$

These correlations are considered "statistically and practically significant" validity coefficients (Cruise et al., 1980, p. 952).

After using a sample of over 4,500 subjects, Blitchington and

Cruise noted (1979) that the  $\overline{II}$  was one of the few scientifically validated four-temperament tests in existence (p. 1).

The Spiritual Gifts Inventory

The other instrument used in this study was <u>The Spiritual</u>

<u>Gifts Inventory</u>, the first of its kind to be developed empirically.

Following is information on its formation, reliability, and validity.

### Formation

In its embryonic form, <u>The Spiritual Gifts Inventory</u> had 140 questions, seven questions on each of twenty spiritual gifts. During its first trial the researchers discovered a problem with subjects answering questions related to the gift of celibacy, and it was eventually dropped; thus the number of questions fell to 133. After the factor analysis procedure, the number of questions was reduced to three per spiritual gift giving a total of 57 questions in the final form of The Spiritual Gifts Inventory.

The administration of the 133 questions brought 1766 usable returns. Through varimax procedures and factor analysis using eigenvalues greater than 1.0, eleven factors were extracted. Some of the nineteen spiritual gifts were fused together "on the same factor." A factor solution was sought to arrive at something between five and twenty factors for the 133 variables. This endeavor led to a reduction to 95 variables (five for each gift), and finally to 57 variables (three for each of the nineteen spiritual gifts). The administration of The Spiritual Gifts Inventory (SGI) to more than 3,000 subjects established the stability of its factors.

The instrument in its published form has three pages of inventory questions. A fourth page is added to determine the score from 1 to 5. The score 1 is for completely false, and the score 5 for completely true. Each question aims at discovering a specific spiritual gift. The <u>SGI</u> is self-scoring. By writing on the fourth page the scores for each of nineteen gifts, and by placing these gifts in descending order, one chooses the first two or three at the top of the list as his/her most probable cluster of gifts. Taking the inventory usually requires about fifteen minutes. The subject is encouraged to give a spontaneous reaction.

Twelve tables are given in the <u>SGI</u> manual showing percentile rank norms, factor loadings, agreement of experts and reliability coefficients for this instrument. These tables support findings on the instrument's reliability and validity.

# Reliability

The <u>SGI</u>, in its final form, was administered to sixty-one subjects twice in an interval between ten and thirty days. The results for test and retest were as follows. Administration: .850; apostleship: .839; discernment: .697; evangelism: .844; exhortation: .695; faith: .762; giving: .780; helps: .664; hospitality: 772; intercession: .693; knowledge: .760; leadership: .758; martyrdom: .827; mercy: .793; mission service: .840; pastoring: .798; prophecy: .790; teaching: .878; wisdom: .777.

### Validity

Face validity of the <u>Spiritual Gifts Inventory</u> was first verified by a panel of experts who identified which of the nineteen

gifts each item measured. A second panel later repeated the same operation. Feedback brought about minor changes in the definitions and the textual support on twenty-four items.

Concurrent validity has, at this point, not been established for the Spiritual Gifts Inventory because this instrument is the first of its type to be empirically developed.

# Pilot Studies of Possible Relationship between Temperament and Spiritual Gifts

In October 1983, a pilot survey conducted on the basis of thirty-two subjects (twenty females, twelve males) gave the results found in table 3. The scores for the gifts are distributed according to each temperament and sex. There were thirteen phlegmatics, eleven cholerics, six sanguines, and two melancholics. Helps and faith were the most widespread gifts, but this sample was much too small for a correlational analysis.

### Procedures for Collecting Data

On March 5, 1984, a letter was sent by the researcher's dissertation committee chairman to the academic dean of each school in the study. The letter (see appendix D1) requested authorization to conduct this study in classes attended by a cross-section of the students. The researcher followed up these letters by personal telephone calls to the respective deans to set up dates for administering the instruments. On March 27, 1984, a second letter (see appendix D3) was sent accompanied by a copy of each instrument to be used in the study, a copy of the cover sheet on which the students would record personal information, age, sex,

# TABLE 3

# SUMMARY OF THE PILOT STUDY ON THIRTY-TWO SCHOOL TEACHERS

Females:	20	Males: 12	
Gifts Temp	peraments	Gifts T	emperaments
Faith Administration Helps Hospitality Martyrdom Prophecy	2 1 1 1 1	Helps Knowledge Leadership	2 1 1
Total Cholerics	7		4
Martyrdom	_1_	Faith	
Total Melancholic	1		1
Faith Mercy Exhortation Helps Hospitality Knowledge	3 2 1 1 1	Helps Discernment Martyrdom	2 1 _1
Total Phlegmatics	9		4
Faith Helps Mercy	! ! !	Mission Service Administration	2
Total Sanguines	3		3
Subtotal	20		12

ethnic background, etc., and a sample advertisement, as shown in appendix D4, explaining the study and suitable for placement in a student newspaper or on a bulletin board. The administration of the instruments to students at the specified schools began that week.

On April 24, 1984, a letter requesting authorization to conduct the study among church members was sent to the pastors of the selected churches (appendix D5). A similar method of follow-up was used with the pastors and they too were sent copies of the instruments.

The procedure for administering the tests differed for the schools and the churches. In the schools, the researcher received the teachers' permission and personally administered the instruments during a single class period. Students spent an average of twenty-five minutes responding to both instruments. In the churches, seminars were conducted in order to explain to the members of the congregation the concept of the four temperaments and the nineteen spiritual gifts. The researcher emphasized the importance of understanding one's own temperament and spiritual gifts. He then administered the instruments to the participants as part of the seminar.

One of the problems encountered in administering the instruments in the churches resided in the difficulty of finding a satisfactory time to meet with the members. In many instances, Saturday afternoon was chosen. In some of these cases, the researcher was asked to preach during the morning worship service as preparation for the afternoon session. In other cases, pastors permitted him to administer the inventories as part of the

Wednesday evening prayer service. In a few rare instances, well-informed members who understood the instrument administered it in place of the researcher after receiving specific instructions from him.

The average church member spent anywhere from twenty minutes to two hours when left alone to complete the questionnaires. However, when the researcher read the questions aloud one by one, the average time for administering both tests was reduced to one hour. This method turned out to be the most effective in obtaining fully completed information sheets. When the church members responded to the instruments on their own, some only returned one inventory, or in other cases, neither of the inventories. It seemed that many of them were reluctant to reveal themselves and this resulted in their failure to turn in the sheets. Others had difficulty completing the questionnaire or following the instructions.

Each respondent in the study was asked to fill out a cover page recording his/her sex, ethnic background, and academic level.

To ensure strict anonymity, names were not requested, unless the participant wished to receive information on the results of the study.

# Hypotheses and Statistical Analysis

For the purpose of statistical analysis the hypotheses are here stated in the null form. In the case only of Caucasian students is the subdivision made into Male and Female, due to the smallness of the sample for the other ethnic groups.

### Hypothesis 1

Among seminary and graduate students and church members, there is no significant canonical correlation between a linear combination of

four temperaments—choleric, melancholic, phlegmatic, sanguine—and a linear combination of nineteen spiritual gifts: administration, apostleship, discernment, evangelism, exhortation, faith, giving, helps, hospitality, intercession, knowledge, leadership, martyrdom, mercy, missionary, pastoring, prophecy, teaching, and wisdom.

# Hypothesis 2

Among male Christian students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Hypothesis 3

Among female Christian students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

### Hypothesis 4

Among Black graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

### Hypothesis 5

Among Hispanic graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

### Hypothesis 6

Among male Caucasian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

# Hypothesis 7

Among female Caucasian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Each hypothesis was tested by canonical correlation analysis. For each hypothesis, one set of variables was the nineteen spiritual gifts measured on <u>The Spiritual Gifts Inventory</u> (Naden & Cruise, 1981). The second set of variables was the four temperaments measured on the <u>Temperament Inventory</u> (Cruise & Blitchington, 1977). For each hypothesis, the alpha (a) level was .05.

All statistical treatment of data was done on the Xerox Sigma 6 Computer at Andrews University Computing Center and statistical programs from the Computer Library were used. The data file included the sex, marital status, ethnic background, and age group of each respondent, his/her scores on the four categorical scales of the Temperament Inventory, and his/her scores on each of the nineteen spiritual gifts of The Spiritual Gifts Inventory.

### Summary

Chapter 3 has presented the research design and methodology of a study of possible correlation between the four-temperament

Inventory (Cruise & Blitchington, 1977) and The Spiritual Gifts

Inventory (Naden & Cruise, 1981) used in the study were described.

Procedures for collecting the sample, gathering the data, and performing the statistical analysis were explained.

#### CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

This chapter presents and analyzes the data concerning the possible relationship between the four temperament types and nineteen spiritual gifts of the New Testament. These data are submitted with the appropriate statistical analysis. The analysis is presented in order of hypotheses.

### Subjects Used in the Study

The subjects used in this study were Christian church members, and Christian students mainly at graduate level. About 2800 sets of instruments, including a sheet requesting information on the respondent, were administered in schools and churches, one set for each person, age twenty and above. Of this total, 1067 subjects (from Michigan, Illinois, Indiana, and Kansas), who returned usable instruments, classified themselves as 221 Blacks, 627 Caucasians, 167 Hispanics, 43 others, and 9 non-identified respondents.

# Analysis of Data and Testing of the Hypotheses

The Temperament Inventory (Cruise & Blitchington, 1977)

yields four scores for each individual, one on each of the four scales:

phlegmatic, sanguine, choleric, and melancholic. The Spiritual

Gifts Inventory (Naden & Cruise, 1981) has nineteen scores for

each individual surveyed, one for each of the nineteen gifts:

administration, apostleship, discernment, evangelism, exhortation, faith, giving, helps, hospitality, intercession, knowledge, leadership, martyrdom, mercy, mission service, pastoring, prophecy, teaching, and wisdom.

Table 4 gives the key to the variables used. For each hypothesis, four canonical correlations result from the analysis, this being the number of variables in the smaller set. In discussing the canonical correlations, only those which are statistically significant are considered.

The data are presented hypothesis by hypothesis with each being accepted or rejected according to the findings in the analysis of the data. The hypotheses are presented in the null form.

### Hypothesis 1

Among Christian seminary and graduate students and church members, there is no significant canonical correlation between a linear combination of four temperaments—choleric, melancholic, phlegmatic, and sanguine—and a linear combination of nineteen spiritual gifts: administration, apostleship, discernment, evangelism, exhortation, faith, giving, helps, hospitality, intercession, knowledge, leadership, martyrdom, mercy, mission service, pastoring, prophecy, teaching, and wisdom.

Table 5-A shows the canonical correlations for the total sample, as well as the chi-square, the degrees of freedom, and the levels of significance for each correlation. Table 5-B gives the standardized coefficients of set one variables (1, 2, 3, 4) and set two variables (5 to 23), for each of the four canonical functions,

85
TABLE 4

# CANONICAL CORRELATION KEY TO VARIABLES USED

Variable No.		Source	Variable Meaning
Set 1	1.	TI	Phlegmatic
	2.	TI	Sanguine
	3.	TI	Choleric
	4.	TI	Melancholic
Set 2	5.	SGI	Administration
	6.	SGI	Apostleship
	7.	SGI	Discernment
	8.	SGI	Evangelism
	9.	SGI	Exhortation
	10.	SGI	Faith
	11.	SGI	Giving
	12.	SGI	Helps
	13.	SGI	Hospitality
	14.	SGI	Intercession
	15.	SGI	Knowledge
	16.	SGI	Leadership
	17.	SGI	Martyrdom
	18.	SGI	Mercy
	19.	SGI	Mission Service
	20.	SGI	Pastoring
	21.	SGI	Prophecy
	22.	SGI	Teaching
	23.	SGI	Wisdom

which corresponded in order to the four correlations. Table 5-A shows that all four canonical functions are significant, with  $\rho < .05$ .

An accepted rule of thumb is to take note of all variables in each set whose standardized coefficient is at least 50 percent of the maximum coefficient in that set or, occasionally, close to that size. Such coefficients are asterisked in table 5-B. In describing the significant functions, the variables of each set are mentioned in order of importance (magnitude of the standardized coefficient).

If, following this rule, a particular variable with only a moderate coefficient does not fit logically into the relationship, this variable is omitted from the discussion.

<u>First function</u>. According to the first function, persons who score higher on the sanguine and choleric scales tend to be strong in the gifts of administration, leadership, and hospitality.

Second function. According to the second function, persons who score higher on the sanguine scale and lower on the choleric and phlegmatic scales tend to be strong in the gift of hospitality, and weak in the gifts of helps, leadership, and wisdom.

Third function. According to the third function, persons who score higher on the mealancholic scale tend to be strong on the gifts of wisdom and evangelism, and weak in the gifts of knowledge and apostleship.

Fourth function. According to the fourth function, persons who score higher on the phlegmatic and melancholic scales and lower on the choleric scale tend to be strong in the gift of pastoring and

87
TABLE 5
CANONICAL CORRELATION FOR THE TOTAL SAMPLE

		A. Leve	ls of Signifi	cance	
Cano	nical Correlati	ion	χ <sup>2</sup>	df	p
1.	.521	!	541.49	76	<.00005
2.	. 339		208.40	54	<.00005
3.	. 208		80.23	34	<.00005
4.	.177		33.70	16	.0060
_		B. Standa	rdized Coeffi	cients	<del></del>
			Functio	n	
Set	Variable	1	2	3	4
1	1 2 3 4	.121 .706* .409* 145	547* .722* 688* 096	116 .290 .412 .926*	1.045* .269 555* .735*
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	.471* .028014004 .124 .104000148 .249* .070035 .401*014 .064026042 .057029025	.207091 .037 .185 .262074 .078667* .485* .077204510*048 .105165081 .124015272*	.084449*080 .426* .303175108 .175130070500* .073154 .141155222104 .060 .701*	330* .293137117 .220606*308* .177123 .168094437* .065 .250 .061 .630*085 .414* .207

teaching, and weak in the gift of faith, leadership, administration, and giving.

In this hypothesis, sanguine temperament has more weight both in the first and the second functions. Choleric comes next, with melancholic third and phlegmatic last.

When in this arrangement sanguine and choleric are blended in a positive relation, the resulting gifts are administration, leadership, and hospitality. When sanguine has negative choleric and phlegmatic tendencies, it keeps only its hospitable quality. According to the first, second, and fourth functions the weight of choleric temperament is strongly associated with the leadership gift. Hospitality appears, then, as the gift of the sanguine and leadership as the gift of the choleric. Melancholic temperament seems associated with the gifts of wisdom and evangelism while melancholic with phlegmatic are associated with the gifts of teaching and pastoring.

#### Hypothesis 2

Among male Christian students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Table 6-A shows the canonical correlations for the male sample as well as the chi-square. the degrees of freedom, and the levels of significance for each correlation. Table 6-B gives the standardized coefficients of set one variables (1, 2, 3, 4) and of set two variables (5 to 23) for each of the four canonical functions.

89

TABLE 6

CANONICAL CORRELATION FOR THE TOTAL MALE SAMPLE

A. Levels of Significance						
Cano	nical Correlatio	on	χ <sup>2</sup>	df	р	
1. 2. 3. 4.	.517 .308 .259 .158		271.82 104.58 50.95 13.55	76 54 34 16	<.00005 <.00005 .0310 .6321	
	<del></del>	B. Standa	ırdized Coeffi	cients		
			Functio	n		
Set	Variable	1	2	3	4	
1	1 2 3 4	.124 .832* .299 .011	.028 .665* 604* .582*	.343 171 .628* .351*	-1.108 006 .549 388	
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	.421*071102 .075 .064 .030009219* .154 .019163 .292*019 .148094 .020 .356*060	.016230124 .304 .399 *340002554 * .064 .(199178692 *060 .201121 .137 .282266 .319	.091320 .118 .444*008655* .089 .641*272 .220238 .203 .134 .072277 .050313091 .547*	.638 544 .113 .663 584 .372 .179 317 .168 018 102 .174 195 216 402 .050	

Table 6-A shows that the first three canonical functions are significant, with p <.05. In table 6-B the major weights are asterisked.

<u>First function</u>. Males who score higher on the sanguine scale tend to be strong in the gifts of administration, prophecy, and leadership, and weak in the gift of helps.

Second function. Males who score higher on the sanguine and melancholic scales and lower on the choleric scale tend to be strong in the gift of exhortation, and weak in the gifts of leadership and helps.

Third function. Males who score higher on the melancholic and choleric scales tend to be strong in the gift of helps, wisdom, and evangelism, and weak in the gift of faith.

Again in hypothesis 2, the sanguine element carries more weight. It appears alone in the first function and occupies the first position in the second function. Administration and leadership are then the corresponding gifts. Twice helps comes in a negative relation.

Helps appears always in a positive relation with choleric and evangelism with melancholic.

It may be said that administration is related to the sanguine temperament, helps to the choleric.

### Hypothesis 3

Among the female Christian students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Table 7-A shows the canonical correlation for the female sample as well as the chi-square, the degrees of freedom, and the levels of significance for each correlation. Table 7-8 gives the standardized coefficients of set one variables (1, 2, 3, 4) and of set two variables (5 to 23) for each of the canonical functions.

Table 7-A shows that the first two functions are significant with p <.05. Table 7-B identifies the more important weights by an asterisk.

<u>First function</u>. Females who score higher on the sanguine scale tend to be strong in the gifts of administration, hospitality, and leadership.

Second function. Females who score higher on the choleric and phlegmatic scales and lower on the sanguine scale tend to be strong in the gifts of leadership, wisdom, and helps, and weak in the gift of hospitality.

In the third hypothesis, sanguine is the only temperament worth considering for the first function. There it shows again a positive relationship to the gifts of administration, hospitality, and leadership.

As for the second function of the total sample, the blending of choleric and phlegmatic with negative sanguine tendency results in the gifts of leadership, wisdom, and helps and a negative relationship with hospitality. The gifts of administration and leadership are shared by the female sanguines with the sanguines of the previous samples. Likewise the gifts of wisdom and helps are shared by the female cholerics with those of the previous sample.

92
TABLE 7
CANONICAL CORRELATION FOR THE TOTAL FEMALE SAMPLE

	A. Levels of Significance						
Canonical Correlation X <sup>2</sup> df							
1. 2. 3. 4.	. 564 . 439 . 242 . 163		338.14 48.79 43.20 13.35	76 54 34 16	<.00005 <.00005 .1339 .6471		
		B. Standar	rdized Coeffi	cients	<u> </u>		
			Functio	n			
Set	Variable	1	2	3	4		
1	1 2 3 4	041 .753* .356 270	.494* 534* .826* .272	378 .371 .248 .757	1.015 .395 471 .853		
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	.497* .072 .117008 .176 .134 .062144 .391* .117009 .379* .042012024127129012012	127 .022 233 155 .022 .268 187 .420* 541* 116 .166 .486* 116 033 .203 .072 001 091	010 185 065 .098 .454 .302 353 119 .009 447 480 .244 049 .037 130 314 222 .523 .107	039 044 188 .030 .150 211 780 .294 .075 .403 127 317 251 .213 .330 .454 372		

#### Hypothesis 4

Among the Black graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Table 8-A shows the canonical correlations for the Black sample, as well as the chi-square, the degrees of freedom, and the levels of significance for the correlations. Table 8-B gives the standardized coefficients for the canonical functions of set one variables (1, 2, 3, 4) and of set two variables (5 through 23) for each of the canonical functions.

Table 8-A shows that the results for the first two functions are significant with p <.05. In table 8-B an asterisk identifies the most important weights.

First function. Blacks who score higher on the choleric and phlegmatic scales tend to be strong in the gifts of wisdom and leadership.

Second function. Blacks who score higher on the sanguine scale and lower on the phlegmatic scale tend to be strong in the gifts of administration, teaching, and hospitality, and weak in the gifts of mission service, wisdom, and helps.

This time the choleric element carries more weight. Again choleric blended with phlegmatic results in the gifts of wisdom and leadership.

The sanguine element takes over in the second function.

Even with a negative phlegmatic tendency it shows a positive relation with the gifts of administration and hospitality and a negative

94

TABLE 8

CANONICAL CORRELATION FOR THE TOTAL BLACK SAMPLE

		A. Level	s of Signifi	cance	
Canoi	nical Correlati	ion	χ <sup>2</sup>	df	р
1531 2463 3322 4205		150.69 81.90 31.68 8.90		76 54 34 16	<.00005 .0071 .5816 .9177
		B. Standar	rdized Coeffi	cients	
	<del></del>	<del></del>	Functio	n	
Set	Variable	1	2	3	4
1	1 2 3 4	.376* .127 .619* 305	529* 1.023* 157 <sub>-</sub> 076	872 431 .859 270	. 240 090 . 422 . 962
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	005 .090 164 080 116 .111 168 .196 .022 .149 .034 .506* 044 .164 .235 .046 160	.591*193037 .071 .125 .023062355* .354* .244103 .135166 .002565*158 .123 .534*	.448 .017 319 .250 987 .625 075 133 194 .130 .470 067 .343 319 147 068 .234	. 234 088 600 . 114 092 285 . 167 . 108 . 177 348 . 677 322 098 026

relation with the gift of helps. As in earlier hypotheses a correlation appears between the choleric temperament and the gifts of wisdom and leadership, between the sanguine temperament and the gifts of administration and hospitality.

#### Hypothesis 5

Among Hispanic graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Table 9-A shows the canonical correlations for the Hispanic sample, as well as the chi-square, the degrees of freedom, and significant levels for the correlations. Table 9-B gives the standardized coefficients for the canonical functions of set one variables (1, 2, 3, 4) and set two variables (5 to 23) for each of the canonical functions.

Table 9-A shows that the first two canonical functions are significant with p < .05. In table 9-B, an asterisk identifies the most important weights.

<u>First function</u>. Hispanics who score higher on the sanguine scale and lower on the melancholic scale tend to be strong in the gifts of leadership, hospitality, and apostleship, and weak in the gifts of giving and wisdom.

Second function. Hispanics who score higher on the choleric scales tend to be weak in the gifts of apostleship and prophecy and strong in the gifts of wisdom and leadership.

Sanguine is related to leadership and hospitality gifts. It

96

TABLE 9

CANONICAL CORRELATION FOR THE TOTAL HISPANIC SAMPLE

A. Levels of Significance						
Cano	nical Correlatio	n	χ <sup>2</sup>	df	p	
1. 2. 3. 4.	.580 .471 .399 .307		141.33 78.60 40.18 15.12	76 54 34 16	<.00005 .0141 .2154 .5160	
		B. Stand	ardized Coeffi	cients	<del></del>	
			Functio	n		
Set	Variable	1	2	3	4	
1	1 2 3 4	.298 .630* .061 436*	307 .181 .884* .356	. 378 823 .545 336	-1.003 123 .264 916	
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	.039 .378* 117 .004 .186 049 412* .132 .401* .221 .053 .513* 189 026 082 082 039 .023 .201 312*	.196605* .061 .146129266 .C79 .949100041 .047 .467* .118 .001 .277097357* .179 .500*	442 .108 283 .109 668 179 .049 .403 .086 .241 .294 .329 .447 069 .031 181 .033 .163	488 .008 .279 107 243 001 .274 632 .490 212 215 .522 .158 018 .372 310 .030 .421	

is not associated with administration gift in the presence of the negative melancholic tendency. Choleric is related to wisdom and leadership.

#### Hypothesis 6

Among male Caucasian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Table 10-A shows the canonical correlations as well as the chi-square, the degrees of freedom, and significance levels for the correlations. Table 10-B gives the standardized coefficients for the canonical functions of set one variables (1, 2, 3, 4) and of set two variables (5 to 23) for each of the canonical functions.

Table 10-A shows that the first two canonical functions are significant with p <.05. In table 10-B, an asterisk indicates the major weights.

<u>First function</u>. Male Caucasians who score higher on the sanguine scale tend to be strong in the gifts of prophecy, administration, and mercy.

Second function. Male Caucasians who score higher on the choleric scale and lower on the melancholic and sanguine scales tend to be strong in the gifts of leadership, administration, faith, discernment, and helps, and weak in the gift of prophecy.

In hypothesis 6, once more sanguine carries more weight in the first function and choleric in the second. This sample shows that prophecy comes first in a relation with the sanguine temperament

TABLE 10

CANONICAL CORRELATION FOR THE MALE CAUCASIAN SAMPLE

98

A. Levels of Significance						
Cano	nical Correlat	ion	χ2	df	р	
1. 2. 3. 4.	. 581 . 345 . 292 . 230		228.85 90.59 48.18 18.28	76 54 34 16	<.00005 .0009 .0543 .3076	
<del></del>	<del> </del>	B. Standa	rdized Coeffi	cients		
			Functio	n		
Set	Variable	1	2	3	4	
1	1 2 3 4	.245 .914* .235 .219	274 481* .843* 636*	.133 032 .561 .996	1.170 317 010 .427	
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	.375* .072147 .083 .002 .129 .036255 .138131125 .052072 .271*194051 .534*140 .240	.551*117 .458*182227 .495* .040 .314* .167282 .003 .600*073108114159389*100247	036 216 .283 .274 116 448 .162 .473 .139 120 403 115 .084 110 395 193 .250 .032 .634	63 12 .10 .066 .484 14 296 .53 246 206 .05 .18 006 416 .91	

and that administration comes second. Leadership and helps are again related to choleric.

### Hypothesis 7

Among female Caucasian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Table 11-A shows the canonical correlations for the female Caucasian sample, as well as the chi-square, the degrees of freedom, and significance levels for the correlations. Table 11-B gives the standardized coefficients for the canonical functions of set one variables (1, 2, 3, 4) and of set two variables (5 to 23) for each of the four canonical functions.

Table 11-A shows that the first three functions are significant with p <.05. In table 11-B an asterisk indicates the most significant weights.

<u>First function</u>. Female Caucasians who score higher on the sanguine scale tend to be strong in the gifts of administration, hospitality, leadership, and giving, and weak in the gift of helps.

Second function. Female Caucasians who score higher on the choleric scale tend to be weak in the gift of hospitality and martyrdom and strong in the gifts of faith, leadership, and helps.

Third function. Female Caucasians who score higher on the melancholic scale tend to be strong in the gifts of exhortation, teaching, and evangelism, and weak in the gifts of giving, prophecy, and knowledge.

TABLE 11

CANONICAL CORRELATION FOR THE FEMALE CAUCASIAN SAMPLE

A. Levels of Significance						
Cano	nical Correlati	on	x <sup>2</sup>	df	р	
1. 2. 3. 4.	.660 .513 .338 .302		290.31 138.49 57.42 25.26	76 54 34 16	<.00005 <.00005 .0072 .0653	
		B. Standa	rdized Coeffi	cients		
			Functio	n		
Set	Variable	1	2	3	4	
1	1 2 3 4	090 .819* .271 268	.276 458 .941* .144	144 .442 .215 .937*	-1.273 236 .210 934	
2	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	.468* .146 .145 .161005027 .300*246* .437*013003 .327* .133089 .040137049175227	017 009 086 277 .189 .485* 151 .417* 609* 044 .026 .463* 339* 135 .181 .159 .251 057	071 212 287 .386* .733* .125 503* 030 .033 227 455* .240 .082 054 036 143 490* .418* .211	.057213010 .813402 .184 .318 .033076624011 .333426 .19 .000478 .524399	

The sanguine, choleric, and melancholic elements of this sample bear much resemblance to the first three samples, in that sanguine carries a positive relation with administration, hospitality, and leadership, and negative relation with helps; choleric is negatively related to hospitality and positively related to leadership and helps. Melancholic is positively related to evangelism. The pattern is not broken by this sample.

#### Summary

This chapter described the subjects used in the study and reported the testing of the hypotheses. All hypotheses were rejected, leading to a number of significant canonical correlations with related functions. Table 12 summarizes these significant findings, which are discussed in chapter 5.

TABLE 12

CANONICAL CORRELATION BETWEEN TEMPERAMENTS AND SPIRITUAL GIFTS ACCORDING TO SEX AND ETHNIC BACKGROUNDS

Samples		First Function	Second Function	Third Function	Fourth Function
	Temp.	San*/Cho*	San/Cho/Ph1+	Hel*	Ph1/Me1/Cho1
Total Sample	Gifts	+Administration +Leadership +Hospitality	-Helps -Leadership -Wisdom +Hospitality	+Wisdom +Evangelism -Knowledge -Apostleship	+Pastoring +Teaching -Faith -Leadership -Administration -Giving
	Temp.	San	San/Hel/Chol	Me1/Cho1	
All Males	Gifts	+Administration +Prophecy +Leadership -Helps	-leadership -Helps •Exhortation	•Helps •Wisdom •Evangelism -Faith	
- <del></del>	Temp.	San	Cho/Ph1/San		<del> </del>
All Females	Gifts	+Administration +Hospitality +Leadership	-Hospitality +Leadership +Wisdom +Helps		
_	Temp.	Cho/Ph1	San/Ph1		
All Blacks	Gifts	+Wisdom +Leadership	* -  *Administration  *Teaching  *Hospitality  -Mission Service  -Wisdom  -Helps		
	Temp.	San/He1	Cho I		
All Hispanics	Gifts	*Leadership +Muspitality +Apostleship -Giving -Wisdom	-Apostleship -Prophecy -Misdom -Leadership		
	Temp.	San	Cho/Me1/San		
Male Caucasians	Gifts	•Prophecy •Administration •Mercy	+Leadership +Administration +Faith +Oiscernment +Helps -Prophecy		
	Temp.	San	Cha	Hel	·
Female Caucasians	Gifts	+Administration +Hospitality +Leadership +Giving -Helps	-Hospitality -Martyrdom +Faith +Leadership +Helps	+Exhortation +Teaching +Evangelism -Giving -Prophecy -Knowledge	

<sup>\*</sup>San = Sanguine, Cho = Choleric, Phl = Phlegmatic, Hel = Melancholic.

 $<sup>^{\</sup>flat}$  and -  $^{\pm}$  Positive and negative indicates the quality of contribution of the element in the function.

#### CHAPTER V

#### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study, with conclusions, implications, and recommendations drawn from the findings.

The study was concerned with the possible correlation between the four temperament types and nineteen spiritual gifts of the New testament.

#### Summary

The summary is presented in four sections: (1) the purpose of the study, (2) the related literature and research, (3) the research design including the population and instrumentation, and (4) the findings of the study.

#### Purpose

Until recently, temperament and spiritual gifts were not assumed to be related. They were seen as offspring of separate disciplines, the former belonging to the realm of psychology and the latter to theology. When some writers hypothesized a possible correlation between the two, others discredited the notion and advocated they be kept separate. A study of this divergence of views revealed the need for an empirical study to determine the probability of a correlation between the traditional four temperament types and a selection of spiritual gifts of the New Testament.

The purpose of this study was to determine whether or not a correlation exists between the traditional four temperament types and nineteen spiritual gifts of the New Testament on the basis of two empirically developed instruments, the <u>Temperament inventory</u> by Cruise and Blitchington (1977) and <u>The Spiritual Gifts Inventory</u> by Naden and Cruise (1981). The study was designed to find whether a correlation existed between a person's temperament and specific gift(s).

# Review of Related Literature and Research

The review of literature was divided into two sections.

The first dealt with spiritual gifts and the second with temperament.

The Old Testament details the bestowal of gifts on specific individuals but only in the New Testament does one find a detailed discussion of the doctrine of spiritual gifts. The English biblical expression "gift" is translated from such Greek words as <a href="charismata">charismata</a>, <a href="pneumatika">pneumatika</a>, <a href="mailto:domata">domata</a>, <a href="energemata">energemata</a>, <a href="diakonia">diakonia</a>. and <a href="phanerosis">phanerosis</a>. Of the seven, <a href="charismata">charismata</a> and <a href="pneumatika">pneumatika</a> were by far the most extensively used. Each one is considered by some biblical scholars "the New Testament word" for spiritual gifts.

Many definitions stemmed from the understanding of the Greek words. They can be summarized as signifying that spiritual gifts are God's given endowment, abilities, or services to persons for the spiritual upbringing of His body, the church.

Finding a list of spiritual gifts satisfactory to all remained an unsettled concern. There were as many lists as proponents. Some were presented by their authors as exhaustive, others

as not. Here it seems that the more extensive and comprehensive the list of all possible gifts the better. Such seems more suitaable because it tends to show a concern for all possible giftedness.

Another difficult question concerned the discovery of a gift.

One group saw no reason to discover a gift while another emphasized the need for all Christians to discover their gifts. It was found that the discovery of a gift not only brought joy but constituted a "must" for the purpose of using it.

The time of the conferral of a gift was another issue. Some scholars thought that a gift was bestowed at the time of the new birth. Others vacillated between that time and a later time in God's answering of a particular need. Still a third group stressed more the idea that a gift answers to a particular need. This study has suggested that both possibilities exist but leans toward the time of conversion.

The last debate turned upon the relationship between natural talents and spiritual gifts. A major position was that a talent becomes a spiritual gift at the new birth. Another insisted that a natural talent and a spiritual gift are totally separate, though the writer did not deny the possibility of the "Christianization" of a natural talent. According to a third position, spiritual enablings are related not only to natural abilities but also to temperament.

The study of temperament also had a long history. The concept dated from Hippocrates' time, twenty-four centuries ago, if not earlier. The impulse which the study of temperament received from Galen in the second century of this era soon faded until the

eighteenth century. This study again became more widespread since the nineteenth century with Kant. Expressions such as extraversion and intraversion tended to dominate the sphere of temperament; but the traditional expressions, namely, phlegmatic, sanguine, choleric, and melancholic still predominate. Until and including Kant, traditional theory held that an individual belongs to one and only one temperament and recognized the idea of pure types. Modern theories posited in behalf of mixed types. Empirical studies record a scoring on each type for every individual.

The issue of nature-nurture was examined in relation to the inheritability of temperament. Hereditarians held that temperament is inborn, inherited, genetic, and therefore, immutable from cradle to the grave. Environmentalists advocated the opposite. Environment is old. It shapes. It conditions temperament.

Another group took a middle position, which this study shares. Inheritance plays an original and definite role in the making of temperament. Inheritance limits; but environment blurs the original dispositions and interacts with them in the individuation of temperament. Race and gender were among the segments of environment that could mold temperament. Religion and, by extension, spiritual gifts appeared more influential in reaction with temperament.

The study was undertaken to verify to what extent, if any, and in which direction a relationship exists between temperament and spiritual gifts between and within sexes on one side and between and within ethnic backgrounds on the other.

No literature existed on this relationship. However, literature and research in both temperament and spiritual gifts separately were available.

## Research Design, Population, and Instrumentation

A correlational research design was used in order to determine the relationship that exists between the traditional four temperament types and nineteen spiritual gifts of the New Testament. The instruments used were:

- 1. <u>Temperament Inventory</u> from Cruise and Blitchington (1977). This has eighty questions; each one offers only a binomial choice.
- 2. The Spiritual Gifts Inventory from Naden and Cruise (1981). This has fifty-seven questions; each one offers a choice on a five-point continuum between false and true.

These instruments were used because of the considerable statistical information available on validity and reliability.

About 2800 subjects participated in the study. They were Christian graduate students and church members. Of this number, only 1067--38 percent--returned sets were usable. The other sets were not complete.

The subjects were divided into seven groups: (1) total sample, (2) total females, (3) total males, (4) Blacks, (5) Hispanics, (6) male Caucasians, (7) female Caucasians. The instruments were divided into two sets: (1) set one for the temperaments, (2) set two for the spiritual gifts.

Seven research hypotheses were formulated for the study leading to seven null hypotheses. Each hypothesis was tested by a canonical correlation analysis. The computer yielded four canonical functions for each group. Only the functions that satisfied the significance level of p <.05 were considered.

### Findings of the Study

This section presents a summary of the findings of the study regarding the seven hypotheses. Table 12 (p. 103) gave an overview of the results.

### Hypothesis 1

Among graduate students and church members, there is no significant canonical correlation between a linear combination of four temperaments—choleric, melancholic, phlegmatic, sanguine—and a linear combination of nineteen spiritual gifts: administration, apostleship, discernment, evangelism, exhortation, faith, giving, helps, hospitality, intercession, knowledge, leadership, martyrdom, mercy, mission service, pastoring, prophecy, teaching, and wisdom.

This hypothesis was rejected.

A blending of sanguine and choleric temperaments, where the sanguine element dominates, was related to the gifts of administration, leadership, and hospitality. In this blending, however, the choleric tendency had the major weight for the leadership gift, and the sanguine for the hospitality gift.

The melancholic temperament showed some relationship with the gift of evangelism, and the blending of phlegmatic and melancholic for the gifts of pastoring and teaching. The blending of choleric and phlegmatic together with sanguine in negative tendency resulted in gifts of helps, leadership, and wisdom.

#### Hypothesis 2

Among male Christian graduate students and church members, there is no significant canonical correlation between a linear combin-

ation of the four temperaments and a linear combination of the nineteen spiritual gifts.

This hypothesis was rejected.

This time, sanguine was found related to the triad administration, hospitality, and leadership. It was also found negatively related to the gift of helps. Helps formed with leadership and wisdom another triad that was related to the choleric element, while the gift of evangelism followed the melancholy tendency.

### Hypothesis 3

Among the female Christian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

This hypothesis was rejected.

At this point, the sanguine temperament was found related to the gift of administration and negatively related to the gift of helps. The gifts of helps and leadership went with the choleric temperament.

Again choleric and phlegmatic in their blending outweigh sanguine to relate positively to leadership, wisdom, and helps.

#### Hypothesis 4

Among Black graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

This hypothesis was also rejected.

The blending of choleric and phlegmatic was related to the

gifts of wisdom and leadership. Sanguine temperament was again related to the gifts of administration and hospitality and negatively related to the gift of helps. Phlegmatic outweighs sanguine to relate positively to mission service, wisdom, and helps. This is the only occurrence of the gift of mission service.

#### Hypothesis 5

Among Hispanic graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of nineteen spiritual gifts.

Hypothesis five was rejected.

The sanguine weight counted for the gifts of leadership and hospitality. No correlation appeared between any temperament and the gift of administration. The choleric temperament is again related to the gifts of wisdom and leadership.

#### Hypothesis 6

Among male Caucasian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

This hypothesis was rejected.

Sanguine temperament was found related to the gifts of prophecy, administration, and mercy. Choleric temperament with a negative tendency of sanguine and melancholic temperaments was related to administration as well as leadership and helps.

### Hypothesis 7

Among female Caucasian graduate students and church members, there is no significant canonical correlation between a linear combination of the four temperaments and a linear combination of the nineteen spiritual gifts.

Hypothesis seven was rejected.

It was found here again that the sanguine temperament was related to the triad administration, hospitality, and leadership, and negatively related to helps. Choleric was found related to faith, leadership, and helps. Again melancholic temperament and the gift of evangelism were related.

#### Conclusions

Observations and discussions on the seven hypotheses led to the following plausible conclusions:

- l. There is a correlation between the four traditional temperaments and some spiritual gifts.
  - a. The sanguine temperament is positively related first to the gift of administration and second to the gifts of leadership and hospitality. It is negatively related to the gift of helps. Sanguine seems to be the temperament par excellence for administration.

This conclusion does not concur with the usual expectation in a healthy administration when one looks at the sanguine as "scatterbrained and unorganized," loser of keys, unsteady, unstable.

But in this study the gift of administration called for cheerfulness, promotion of unity and enthusiasm,

acceptance of consequences for decisions made (p. 11). For Roback the sanguine type is "the most amiable of the quartet; for Metzner the sanguine is kind and affectionate. Others see him as charming, tender, open to new ideas. According to this study, the sanguine has strong potential for administration.

b. The choleric temperament is positively related first to the gift of leadership and second to the gifts of helps and wisdom. It seems to be the temperament for leadership.

This conclusion falls in line with theory.

It is generally believed that the choleric temperament fits the leadership role.

c. The melancholic temperament is strongly related to the gift of evangelism. It seems to be the temperament for evangelism.

This conclusion concurs with the general belief that the outstanding biblical evangelists were of the melancholic type.

d. The phlegmatic temperament is always related to the gift of wisdom. It seems to be the temperament for wisdom and mission service.

This conclusion agrees with the description of the phlegmatic type and the definition of wisdom. However the phlegmatic is generally believed the temperament for administration. There is some discrepancy between theory and the results of the

inventories used in this study as far as phlegmatic and sanguine temperaments are concerned. Therefore the correlations do support most expectations but not all.

- 2. Helps and hospitality are different gifts. When they appear in a same function, they are always of opposite tendencies.
- 3. Leadership and administration are different gifts. Leadership and administration tend to appear in the same function in positive relation with sanguine temperament, but not with choleric and sanguine which are of opposite tendencies. Leadership always correlates with choleric and administration with sanguine.
  - 4. Many gifts do not correlate with the four temperaments.
- 5. Among Caucasians, there is no significant difference in correlation between females and males: for both sexes, there is a positive correlation between choleric temperament and leadership gift, between sanguine and administration. However, there is a positive correlation among the males between sanguine and prophecy, but no such correlation among the females.
- 6. For Hispanics, no correlation appears between the gift of administration and any temperament.
- 7. As a whole, males and females appear to have the same gifts if they have the same temperament. The correlation between temperament and spiritual gifts is very similar for Blacks, Caucasians, and Hispanics. For a given position, temperament is more important than sex and ethnic background.

#### Implications

- 1. The Temperament Inventory (Cruise & Blitchington, 1977) and The Spiritual Gifts Inventory (Naden & Cruise, 1981) can be of great service to Christian organizations in the selection of prospective workers and in the filling of positions for different aspects of service. Temperament should also be considered in vocational choice.
  - a. The administration position could be better filled by an individual with a predominance of sanguine temperament in combination with phlegmatic. This individual is likely to be hospitable and practical.
  - b. The leadership position could be better filled by an individual with a predominance of choleric temperament. This individual is likely to be helpful and wise.
  - c. A melancholic is likely to be successful in evangelism, exhortation, and counseling ministries, and to be weak in faith. He is more likely to act by reason than by faith.
  - d. A phlegmatic is likely to do well in positions that require much wisdom. He can succeed in leadership or administration depending on whether he is secondly a choleric or a sanguine. In any case the predominance of the temperament should be taken into consideration.
- 2. Helps and hospitality should be differentiated and considered as discrete gifts.
- 3. Leadership and administration are not the same gift despite the fact that they are loaded on the same factor in the

analysis of data in the development of the SGI. They should not be confused as Orjala (1979, p. 33) seemed to imply.

4. Some discrepancies found in this study must be further studied to establish whether there is a correlation between certain gifts and a temperament. Gathering more appropriate samples could be the solution for some gifts to appear in correlation with one or more temperaments. This is also true for comparison between sexes among different ethnic backgrounds.

#### Recommendations for Further Study

The following recommendations are made:

#### For Practice

- 1. Establish a vocational orientation to help young people in the selection of a profession or vocation in the line of their temperament and spiritual gifts. This step would spare unnecessary frustration on all sides.
- Set out in churches and other religious communities
   a specific process for development according to temperament and
   giftedness.
- 3. Organize in schools, churches, offices such as Seventh-day Adventist conferences and communities for Christians, a program of recruitment of personnel according to temperament and spiritual gifts.

#### For Further Research

- 4. Conduct a further study that allows all gifts to appear in correlation with the temperaments.
  - 5. Conduct a study in which Black and Hispanic samples yield

enough subjects to allow a comparison between and within both sexes of those ethnic backgrounds and with the Caucasian males and females.

6. Conduct further research in order to verify the results obtained in the present study.

APPENDICES

APPENDIX A

SCHOOLS USED IN THE SAMPLE

#### SCHOOLS USED IN THE SAMPLE

- l. Andrews University is a privately supported institution operated by the Seventh-day Adventist church. It is located in Berrien Springs, Michigan 49104, (616) 471-7771. It has an enrollment of 1300 men and 900 women, of whom 300 men and 330 women attend on a part-time basis. Among others, it offers programs leading to Master's and Doctoral degrees in Theology, Religion, and Religious Education.
- 2. Calvin Theological Seminary, 3233 Burton St., S.E., Grand Rapids, Michigan 49506, (616) 949-2404, operates under the auspices of the Christian Reformed Church. It offers Master of Divinity, Master of Church Education, Master of Arts in Theological Studies, and Master of Theology degrees. It has an enrollment of approximately 180 men and twenty women.
- 3. Western Theological Seminary, 86 East 12th Street, Holland, Michigan 49423, (616) 392-8555, is affiliated with the Reformed Church in America. It has a recent enrollment of 100 men and twenty-one women and offers programs leading to the Master of Divinity degree, Master of Religious Education, Master of Theology, and Doctor of Divinity degrees.
- 4. Associated Mennonite Biblical Seminaries, the address of which is 3033 Benham Avenue, Elkhart, Indiana 46514, (219) 523-1385, is a privately supported graduate theological seminary composed of two seminaries, one of which is Goshen College. They grant the Master of Divinity and the Master of Religious Education degrees. The enrollment is about 140 students.

5. Notre Dame (University of), Indiana (near South Bend) 46556, (219) 283-6011, is a privately supported university under the auspices of the Roman Catholic Church. It has an enrollment of 5250 men and 1550 women.

APPENDIX B

CHURCHES USED IN THE SAMPLE

### CHURCHES USED IN THE SAMPLE

Bethlehem SDA Church is located at 811 West 103rd Street in Chicago, Illinois 60628, (312) 233-0530. It has a membership of 140.

Hispanic Central SDA Church, located at 913 North Hoyne Avenue, Chicago, Illinois 60622, (312) 227-4008, has 352 members.

The congregation of North SDA worships at 7120 Sunnyside, Chicago, Illinois 60625, (312) 989-8140. It includes 121 baptized members.

Hispanic Northwest SDA Church, the address of which is 4138 West North Avenue, Chicago, Illinois 60639, (312) 743-8764, has approximately 90 members.

Hyde Park SDA is also located in Chicago at 4608 South

Drexel Boulevard, Chicago, Illinois 60653, (312) 373-2909.

Approximately 607 individuals are listed as members of this congregation.

Shiloh SDA is a predominantly Black church, located at 7000 South Michigan Avenue, Chicago, Illinois 60637, (312) 224-7700. Its membership is 2822.

South Suburban SDA, located on Kadie Avenue in Flossmoor, Chicago, Illinois 60642, (312) 798-9601, has 244 members.

Berean SDA Church, with a membership of 323 is located in Indiana at Colfax Avenue, South Bend, Indiana 46601, (219) 234-2784.

Benton Harbor Fairplain SDA Church, located at 1352 Colfax, Benton Harbor, Michigan 49022, (616) 426-8821, has a membership of 284.

Berrien Springs SDA Church is located at 635 North St.

Joseph Road, Berrien Springs, Michigan 49103, (616) 471-7795,
and includes in its membership of 1200 some faculty and students
from Andrews University.

Buchanan SDA Church on Niles-Buchanan Road in Buchanan,
Michigan 49107, has a membership of 117. Its pastor can be reached
at (616) 473-3421.

Dowagiac SDA Church just moved to 11 South Lowe St., Dowagiac, Michigan 49071 with a membership of 59. Its telephone number is (616) 782-8463.

Eau Claire SDA Church has a membership of 174. It is located at 103A Naomi Road, Eau Claire, Michigan 49111, (616) 944-1721.

Grand Rapids SDA congregation worships at 100 Burton Southeast in Grand Rapids, Michigan 49507, (616) 245-9237. It includes 132 members.

Highland Avenue SDA Church at 2075 Highland Avenue, P.O. Box 809, Benton Harbor, Michigan 49022, (616) 926-8872, has a congregation of 367 members, many of whom are teachers or students at Andrews University.

Holland Spanish SDA Church, located at 57 West 10th Street, Holland, Michigan 49423, (616) 676-0693, has 38 members.

## APPENDIX C

TABLES SHOWING MEANS AND STANDARD DEVIATION FOR THE SAMPLES

TABLE 13

MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE TOTAL SAMPLE

Variable	N	Mean	Standard Deviation
1	1052	12.300	4.689
2	1051	13.836	5.204
3	1052	15.138	4.045
4	1052	10.855	5.585
5	1037	10.011	2.691
6	1037	8.647	3.097
7	1037	9.969	2.262
8	1037	7.490	2.891
9	1037	10.040	2.631
10	1037	11.902	2.438
11	1037	9.564	2.573
12	1037	11.266	2.170
13	1037	9.899	2.833
14	1037	9.509	2.762
15	1037	10.943	2.786
16	1037	10.118	2.442
17	1037	10.342	2.966
18	1037	10.500	2.759
19	1037	10.091	3.131
20	1037	9.036	3.103
21	1037	10.226	2.697
22	1036	9.846	3.329
23	1036	10.085	2.356

126
TABLE 14
MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE MALE SAMPLE

Variable	N	Mean	Standard Deviation
1	546	13.194	4.567
2	546	13.921	5.179
3	546	15.240	4.014
4	546	10.366	5.669
5	538	10.543	2.585
6	538	9.617	2.986
7	538	10.082	2.187
8	538	8.002	2.961
9	538	10.058	2.532
10	538	11.773	2.472
וו	538	9.630	2.590
12	538	11.119	2.208
13	538	9.848	2.724
14	538	9.232	2.628
15	538	11.537	2.707
16	538	10.528	2.423
17	538	10.732	2.794
18	538	10.578	2.626
19	538	10.509	2.987
20	538	9.996	3.139
21	538	10.448	2.653
22	538	10.809	3.200
23	538	10.284	2.287

TABLE 15

MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE FEMALE SAMPLE

Variable	N	Mean	Standard Deviation			
1	499	11.319	4.646			
2	498	13.777	5.222			
3	499	14.998	4.086			
4	499	11.415	5.454			
5	490	9.447	2.699			
6	490	7.584	2.864			
7	490	9.853	2.331			
8	490	6.955	2.707			
9	490	10.051	2.710			
10	490	12.035	2.395			
11	490	9.504	2.559			
12	490	11.433	2.125			
13	490	9.967	2.951			
14	490	9.806	2.887			
15	490	10.294	2.724			
16	490	9.680	2.397			
17	490	9.900	3.103			
18	490	10.422	2.886			
19	490	9.624	3.231			
20	490	7.998	2.705			
21	490	9.988	2.734			
22	490	8.790	3.153			
23	490	9.869	2.426			

TABLE 16

MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE BLACK SAMPLE

Variable	N	Mean	Standard Deviation
1	216	13.162	4.452
2	216	13.995	4.957
3	216	15.046	4.216
4	216	10.838	5.594
5	210	10.390	2.666
6	210	8.600	3.194
7	210	9.881	2.382
8	210	8.329	2.961
9	210	10.429	2.608
10	210	12.490	2.115
11	210	10.162	2.525
12	210	11.638	2.199
13	210	9.695	3.031
14	210	9.776	2.708
15	210	11.238	2.822
16	210	10.486	2.360
17	210	10.424	2.978
18	210	11.362	2.519
19	210	10.457	2.978
20	210	9.305	2.896
21	210	10.962	2.588
22	210	10.557	3.152
23	210	10.367	2.391

TABLE 17

MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE HISPANIC SAMPLE

Variable	N	Mean	Standard Deviation
1	163	11.202	4.206
2	163	13.816	4.671
3	163	14.822	3.791
4	163	11.595	4.897
5	163	9.902	2.940
6	163	9.147	3.025
7	163	10.233	2.525
8	163	8.160	2.992
9	163	10.000	2.722
10	163	12.883	2.305
11	163	10.319	2.434
12	163	11.356	2.069
13	163	10.638	2.615
14	163	9.945	2.864
15	163	11.258	2.707
16	163	10.000	2.687
17	163	11.153	2.750
18	163	10.706	2.935
19	163	10.982	2.718
20	163	9.828	3.009
21	163	10.356	2.768
22	163	10.429	3.383
23	163	10.264	2.457

TABLE 18

MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE MALE CAUCASIAN SAMPLE

Variable	N	Mean	Standard Deviation
1	348	13.310	4.753
2	348	13.865	5.335
3	348	15.379	3.974
4	348	10.190	5.795
5	343	10.388	2.478
6	343	9.472	2.980
7	343	9.878	2.117
8	343	7.431	2.787
9	343	9.883	2.502
10	343	11.259	2.423
11	343	9.251	2.663
12	343	10.991	2.209
13	343	9.706	2.674
14	343	8.983	2.600
15	343	11.373	2.690
16	343	10.484	2.313
17	343	10.528	2.862
18	343	10.117	2.575
19	343	10.099	3.130
20	343	9.767	3.245
21	343	10.222	2.572
22	343	10.487	3.162
23	343	10.093	2.192

TABLE 19

MEANS AND STANDARD DEVIATIONS FOR THE VARIABLES OF THE FEMALE CAUCASIAN SAMPLE

Variable	N	Mean	Standard Deviation
1	275	11.142	4.693
2	274	14.022	5.413
3	275	15.196	4.080
4	275	11.167	5.559
5	273	9.289	2.698
6	273	7.304	2.818
7	273	9.985	2.140
8	273	6.399	2.558
9	273	9.919	2.725
10	273	11.645	2.432
11	273	9.018	2.464
12	273	11.322	2.123
13	273	9.864	3.017
14	273	6.678	2.861
15	273	9.989	2.715
16	273	9.454	2.376
17	273	9.579	3.097
18	273	10.114	2.925
19	273	9.081	3.308
20	273	7.418	2.577
21	273	9.546	2.764
22	273	8.051	3.034
23	273	9.663	2.435

## Temperament and Spiritual Gifts Inventories PLEASE PROVIDE THE FOLLOWING INFORMATION\*

Sex:			Marital State	-		
	•		Mar:			
	Male		Sin	gle orced		
	Female		D100	orced		
Ethnic B	Background:		Age Group:			
	Black		Below	₩ 20		
	Caucasian Hispanic		21 to	o 30		
	_ Hispanic		31 to	o 40		
	Other (specify)		41 to	o 60		
			Over	60		
	•					
±0-1 F:	1! out the section	below if we	w wish to rec	oira th	a raculte of	
	.ll out the section eventories. PLEASE		od wish to lect	erse cu	e results or	
,						
Name		<u></u>				
Address	St					
	St	reet				
	City	State	ZIP Code	e		
(TO BE C	OMPLETED BY RESEARC	CHER)				
l. Your	<u>predominant</u> temper	rament is:				
		_	Choleric			
		-	Melanchol:			
		_	Phlegmatic	С		
		-	sanguine			
2. Your	spiritual gifts a	re ;				
	_Administration	Apos	tleship		Discernment	
	_Evangelism	Exho	ortation		Faith	
	_Giving	Help	s/Service		Hospitality	
	_Intercession	Know	ledge		Leadership	
	_Martyrdom	Mercy			Missionary	
	_Pastoring	Prop			Teaching	
		Wisd	ುಪ -			

APPENDIX D

CORRESPONDENCE

D-1

March 5, 1984

Dr. Jacob W. Elias Associated Mennonite Biblical Seminaire 3033 Benham Avenue Elkhart, IN 46514

Dear Dr. Elias:

One of my doctoral candidates, Roland Joachim, is presently conducting research on the possible relationship between temperament and spiritual giftedness.

This is an area in which no research has been conducted of which we are aware.

Mr. Joachim needs 2,000 subjects for his study considering the number of factors in the temperament and spiritual gifts instruments he will be using.

The results - the study will be available to each participant who desires them.

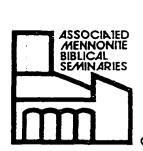
This study will probably be of interest to every Christian student. Thus, if you could be of any help to Mr. Joachim in arranging for him to use some of the students of your institution for this study, he and we would be extremely grateful.

With every good wish.

Very cordially yours,

Roy C. Naden, Ed.D. Associate Professor of Religious Education

tjt



D-2

March 16, 1984

Roland Joachim Andrews University Berrien Springs, Michigan 49104

Dear Roland:

I have before me a letter from Roy C. Naden, Associate Professor of Religious Education, who indicated your interest in conducting research on the relationship between temperament and spiritual giftedness. He mentions that you need 2,000 subjects for this study and he solicits my help in arranging for you to use some of the students here at AMBS for this study.

Before I can respond to this request, I should have more information about what will be asked of our students. Will this be a questionnaire? Are you planning to interview students? How much time will be involved? What kind of sample do you desire? These and other questions are not addressed in the letter.

I will appreciate a clarification of these matters. Thank you.

Sincerely,

Jacob W. Elias

Jaw. Ean

Dean

mc

cc: Roy C. Naden

March 5, 1984

Dr. David H. Egelhard, Dean Calvin Theological Seminary 3233 Burton St. S.E. Grand Rapids, MI 49506

Dear Dr. Egelhard:

One of my doctoral candidates, Roland Joachim, is presently conducting research on the possible relationship between temperament and spiritual giftedness.

This is an area in which no research has been conducted of which we are aware.

Mr. Joachim needs 2,000 subjects for his study considering the number of factors in the temperament and spiritual gifts instruments he will be using.

The results of the study will be available to each participant who desires them.

This study will probably be of interest to every Christian student. Thus, if you could be of any help to Mr. Joachim in arranging for him to use some of the students of your institution for this study, he and we would be extremely grateful.

With every good wish.

Very cordially yours,

Roy C. Naden, Ed.D. Associate Professor of Religious Education

avf

# calvin theological seminary



OFFICE OF ACADEMIC DEAN

3233 BURTON STREET, S.E., GRAND RAPIDS, MICHIGAN 44536

3 April 1984

Mr. Roland Joachim Andrews University Berrien Springs, MI 49104

Dear Mr. Joachim:

I have placed an announcement in our school newspaper that you will conduct your testing on the possible relationship between temperament and spiritual giftedness on Thursday, April 12 at 10:00 a.m. If this is not possible for you, please call me soon at (616) 957-6033.

Sincerely,

David H. Engelhard Academic Dean

DHE/e

D-3

March 27, 1984

RE: Doctoral dissertation research instruments

#### Gentlemen:

Enclosed please find theopy of the instruments which will be used for conducting research on the posstble relationship between temperament and spiritual giftedness as per our telephone conversation of March 22, 1984.

Please look them over and reply to me as to your decision for arrangements to conduct this study.

A copy of my recent letter is enclosed also to refresh your memory regarding my request.

Thank you for your time, consideration and speediness in replying.

Very sincerely yours,

Roland Joachim
Doctoral Candidate

tjt

D-4

Have you ever wondered about your spiritual gifts? Have you ever wanted to know whether your personality was suited to the type of ministry that you have chosen or been called to? The Temperament Inventory and the Spiritual Gifts Inventory can help you discover just that. They will help you determine what type of temperament or personality you have, and what spiritual gifts God has bestowed upon you. You can find all of this out simply by spending 15 minutes filling out these inventories. These inventories will be given free of charge to students here at this school in order to study the correlation between the two tests. Since this is part of a study, you will not be required to give your name. However, if you wish to receive the results of your personal inventory, you may include your name and other relevant information.

### Andrews University Berrien Springs, Michigan 49104 (616) 471-7771

April 24, 1984

Pastor Bustos Hazael Hispanic Central S.D.A. Church 913 North Hoyne Avenue Chicago, IL 60622

Dear Pastor Hazael:

One of my doctoral candidates, Roland Joachim, is presently conducting research on the possible relationship between temperament and spiritual giftedness.

This is an area in which no research has been conducted of which we are aware.

Mr. Joachim needs 2,000 subjects for his study considering the number of factors in the temperament and spiritual gifts instruments he will be using.

The results of the study will be available to each participant who desires them.

This study will probably be of interest to every Christian. Thus, if you could be of any help to Mr. Joachim in arranging for him to use some of the members of your church for this study, he and we would be extremely grateful.

With every good wish.

Very gordially yours

Roy C. Naden

Associate Professor of Religious Education

APPENDIX E

RAW SCORES

### DATA DICTIONARY

The explanation for the columns is as follows:

Cols. 1-4	ID Number
Col. 5	Blank
Col. 6	<pre>Gender (0 = information not provided; l = Male; 2 = Female)</pre>
Col. 7	<pre>Marital Status (0 = information not provided; l = Married; 2 = Single; 3 = Divorced)</pre>
Col. 8	<pre>Race ( 0 = information not provided; 1 = Black; 2 = Caucasian; 3 = Hispanic; 4 = Other)</pre>
Col. 9	Blank
Col. 10	Age (0 = information not provided; 1 = 20; 2 = 21-30; 3 = 31-40; 4 = 41-50; 5 = 51-60; 6 = over 60)
Col. 11	Blank
Cols. 12-13	Phlegmatic score (00 = information not provided)
Cols. 14-15	Sanguine score (00 = information not provided)
Cols. 16-17	Choleric score (00 = information not provided)
Cols. 18-19	Melancholic score (00 = information not provided)
Col. 20	Blank
Cols. 21-57	The nineteen spiritual gifts scores, two columns each (A blank in a column stands for zero, not typed; 2 blanks for information not provided).

```
0367 222 2 02071 921 09091 2071 014071 5091 1081 01 31 31 5081 2091 2
0368 213 3 13152014 09101310121511091013141414111105110815
0369 222 2 05141609
0370 114 4 12040910 121310101314111111208141210131513131513
0371 222 2 13181709 10081106111007100908111107100606100710
0372 122 1 14160318 10131009111109091009121212121109121310
0373 112 2 18161705 12050605081106100804090911081006070910
0373 122 2 17192004 09111208131312120910150811111409151413
0374 112 4 11141712 10081208081308140808111211131513121413
0374 222 2 09131203 0607100308080515121004071515:104100414
0375 112 2 04201917 10111006091309090908141212121212091310
0375 122 2 17201807 14120907121309110909141512091215111211
0376 112 2 08181209 120910111012091013111510111113111111209
0376 222 2 12161309 08070708141109141411120907140807141211
0377 112 2 11211212 12111209091208101109111109100911121210
0377 221 2 12221314 15121210111511111513131309131411131111
0378 122 2 18182006 09050706060908090609080506060506060806
0379 113 4 19122024 12100707090907101109111010081111080908
0379 222 2 16201804 11051107101009101412100908060604110907
0380 112 2 14161613 12121105131208101011141111101313151211
0380 221 2 07181507
0381 121 2 14181614 14151308151312101106151513121010101015
0382 111 6
                 10100805071109100811100711101011091009
0382 122 2 18211205 12091010111208090908091107131007120911
0382 122 3 13191901
0383 122 3 06082005 12080609101306141012121015121009111407
0383 221 2 03051118 08080705080907090707080803060407070607
0384 112 2 16221809 12131210121310111108111215121011111012
0384 112 2 18130705 09100505110803110906121109071010101407
0385 122 2 11071915 09041004090909100708081207101107060812
0385 212 2 11201804 13101110131513130910130913091204121314
0386 222 2 18181207 11061204071412111011091213121504100912
0587 222 2 17201301 070611081214071011101111010111207100511
0388 112 2 15130919 091009081209091109051111111111211121010
0390 112 2 19141706 08081004150711110707091211110808150510
0591 112 2 09152021 10120603111005090607090912131013111009
0391 112 2 15081607 07071104140906101008121310001312110710
0592 112 4 15131908 11110605091008091205111307040511111110
0392 221 2
                 13120507141108131105131313071407141510
J393 112 2 18151309 12131111091109121110131314141513121310
2595 213 2 12171611 101112071212111140912111112111012141011
0593 213 2 12171611 10111207121211140912111112111012141011
0394 113 3 16121408 09121106071511111311090815081009060204
0395 213 3 15131508 09120707061511121211120815041010060405
0396 112 2 02212014 15121209121213100705131209101111121412
```

```
0450 221 2 16162010 10080908121107061009081109090607080810
0451 223 2 06191923 12061506111108130809090911151206100914
0452 222 2 12131411 07071006121110111212110811120807110812
0455 112 2 09121116 14101003071009110809141406080610101413
0456 232 2 05162020 13110707101006080809011060506111111110
0457 111 5 16181503 10080808101310111412100902100910120808
0457 112 2 16191804 11111410121409121214111213121409121113
0458 122 2 07211607 10131106091204061008:41207100111121209
0458 224 2 08071016 07080807081008120810110709090910110910
0459 224 2 12031618 11081210091312120908070912111511120710
0460 211 6 19081202 09060906141508131110091108121209141010
0461 221 6 15060510 09030903031310140804020605080807080608
0464 111 3
                   07040604040909120406060509100907060505
0465 223 2 14211711 15071105091407090807121208081010120613
0467 223 2 08141514 08080910111110101010100809100708081011
0468 221 2 04040603
0469 224 2 04070; )1 09091009030809090909070911090909090
0470 221 2 06090912 09080907080910080909101009061009070909
0471 224 2 14141712 10091412131513110915141214121511151415
0472 222 2 16201603 11061008131007121410060807121108130612
0473 222 2 15201910 11081107121108091109091309090807100712
0474 222 2
                   09041205081211150910100713101104090511
0475 224 2 10191913
0476 221 2 17141505 10091308091408111108100909111207100912
0477 224 2 11070711 1008100811!111100910111012101008091010
0478 224 2 05141220 07051007091510100714100913101110120808
0479 221 2 15030717 05031403141410120708070908110607120611
0480 221 2 15181911 08031307091109080908121113151113110712
0483 222 2 14171916 12080305070608070711090905070607061110
0484 225 2 05131816 13091309071109101307121215090706090910
0435 221 2 08090306 06081110110910110709110907080610100608
0487 211 3 14171312 13090613131513121311151514131509141513
0487 221 2
                   09051307121005091209051004090609100810
0437 223 1 09141013 09051307121005091209051004090609100810
0489 221 1 13141721 05050504080705061004090503070903070608
0490 222 2 03210821 12070706090909101510081103120509071408
0492 223 2 15111510
0493 222 2 14072023 05061007121203121115090809100808120911
0494 222 2 10221715 11061205120907110906071213141007050613
0495 222 2 16091915 06051205140706100908111113110407121114
0436 212 5 10211309 101111121013131111111131109110912121311
0497 222 2 10221719
0493 221 2 13151307 10100908101008080707060807070606070607
0439 222 2 04141716 10041105130305070611060806110303110410
0500 225 2 04131315 09071204091105070909081113131503100911
0501 222 2 08071921 11060904151107151007030714111505100511
0505 222 2 09211111 13071205091408091214111313141105130812
0504 222 2 15191805 12090906101009121408091112101208110811
0505 221 2 12090817 08061008101207080910071010121009090908
0508 222 2 16122004 15101503071407130711120913061209040513
0509 225 2 13181706 10111009111210101310081008130509101109
0510 224 2 04021324 06050803120307100906091305111105130812
2511 224 2 15211102 10080711140809071111091209110808091114
```

```
1177 212 2 15132005 10061203051203090612080909030309060508
1178 231 4 02131614 12071210111509131512090812120705120712
1179 112 4 14061908 08030903040911110610040714111405050406
1179 211 3 16151905 07070604081311120809101309130912071010
1130 112 2 17061908 111111007061109120907121011091008061210
1180 213 4 08091513 10040803051410151007140715081406070611
1131 122 1 05101710
1184 212 2
                    10090906121009121010081110120809110611
1135 122 2 14071611 08090704080906060909110707061104070811
1186 222 2 15131314 10131006130907131311081106100708121212
1190 122 2 19161305 12091210141309090803121315151413121113
1191 222 1 14211608 13090805101308080808121213121110100909
1195 122 2 17171209 11081308121109130412141112101306121510
1195 222 2 10141311 11100903111414131111101013101110111009
1197 122 2 13201608
1294 211 4 09161516 07121208101313140907131212081110111211
1313 211 4 10151015 08060907061410130809090909100908081106
1319 121 6 15172010 11070906071409100708121109100705060709
1375 112 2 17181504 14101110101409131410131215141515121311
1376 122 3 16200806 11131006121009101107110909091008121012
1377 112 2 10061617 10141005101005070505140703030613091410
1378 112 2 13161608 11131105111109121111101212131112111111
1379 112 2 13141101 120809071211121211101211100913151111110
1380 112 2 17170602 080909030608! 1130605090915131409050607
1381 112 2 17201504 12121008121012091209101211131212111011
1382 112 2 171 91 907 12141007111409091009131209100914121313
1585 122 2 13201106 10100910131213121511120914141407151108
1386 122 2 11141110 08090805081407100910120712081111031110
1387 112 2 17181705 13111009091409120909131113130914121211
1388 112 2 14171510 13101006061312070812151012111409101210
1389 112 3 19161901 12121110100909091209121110090810101010
1392 112 2 16121907 11121405101308101106141310131410131409
1595 112 4 09191709 11091107091208101513121109101111121109
1395 111 3 17221308 12111111151514141110101308121213141312
1398 112 2 18141507 10091010120909131008121208120812121112
1599-112-2-18101609-11131005091412130708141011101314071110
1401 114 3 02041417 09080309090910101009141011111209111311
1407 112 2 15181806 13130906081106100909131112090812111310
1403 112 2 13171606 12091009111203111009111011101111101110
1409 122 3 15141807 13101208111312131109141210111315131412
1410 112 2 15201403 11121203121313031110131314131411141412
1411 112 2 15162021 12111111111313121112141312131212121211
1412 122 2 16101904 11111004091206110607121114070715080911
1413 112 3 03081423 1112110811121210111121212111111212121
1414 112 2 13131107 10111215101303101108101115131415131311
1415 112 2 13201302 1310080707110303090303141110031012111208
1417 122 2 15151403 09120911110606100706121009100612101210
1418 112 3 19101303 111111007110907101112131010080614121110
1419 222 3 11151707 11101312121209101212121008091010111111
1420 122 2 17191605 13121011121011131314151412131211121411
1424 112 3 19121305 10091006131209100805111315091110101011
1427 112 2 18201800 11130907111019080907121208080811111411
1428 114 2 17201603 13121010121410101009141111071111121310
1429 112 2 16131702 12110908111209090303141211091011121210
```

```
1430 112 2 171 92004 111 310061111 091 20 90 91 31 10 90 90 71 21 01 11 1
1432 112 3 02122021 11121011101113121309121212101110121210
1433 122 2 07210615 08110906101207111109131014101210101310
1435 211 4 14121619 07081007061210110512090706080608070809
1438 131 4 14101706 11081012091208121010140914121212091410
1441 222 1 07141913 08031007081514120711140911110907101106
1447 211 5 10151112 07090709071509120911100911100910090807
1449 211 3 00000200 11100911111415111515150713141312141211
1451 211 4 08101516 07030505081010101105130909140306070506
1453 211 5 17212018 14111113141514151514151415151406151514
1475 211 4 14201418 03030705041211121209040503100505060504
1476 111 6 13151409 09110909121312101212091109110407101110
1492 111 4 10131413 12030704090705150304050705130705060308
1497 211 6 00201719 08030805131109120513030809110403120807
1498 211 4 16171 317 14121 31111 1510 1111 1215 1312 111 109 12 15 13
1500 221 2 17061012 030708081109111009061111112101208131313
1506 111 5 19191922 15111212131512131009151414131410111513
1515 111 6 14131012 10071205080712131407101406151109081012
1516 121 2 161 32016 131 3091 112141 1131 01414 1412 1415 141 31510
1525 211 5 16181910
1526 111 3 17131616 1011101108111212091113121212121211121312
1548 111 5 14181314 141111111314141111113151214141311111312
1576 122 2 19171106 08100907100806090808110906110912111109
1577 132 3 03071613 09050705111410140705091215131009110909
1578 112 2 14201912 13131110121210101210141509070712121412
1579 112 3 19171304 12121107131308090809101210101213121211
1585 111 6 17191513 080307041014101207:3070912140809111006
1616 231 5 17161708 14081112121513130815;21015151512141112
1613 122 2 18071307 13121007151407101110151415111411141411
1620 112 2 17161505 10111109101012111111141314151113121312
1621 112 2 13131004 07091004091410100608111113070709091013
1625 113 4 13171606 15150714101511081310131309071315151515
1629 112 2 16131300 12090907101308121211141212111113111310
1632 112 2 15111505 090910080911080909081209111011111101009
1633 112 2 07121715 13111109101308110810121111070911091212
1644 122 2 15201311 11101010091307100709121213030906111110
1656 221 4 17131316 07030506111212150511110805110906100709
1666 111 3 14131617 10070706071009090807090308090906070909
1670 112 4 17141709 13131012141010130908151206081014131511
1671 212 2 05181621 07041203121409120711120808040904090310
1672 222 1 05051321 09071006101107120806101009110607080509
1673 242 6
1702 113 3 08131315 15091207091311110714131512071211121313
1703 212 4 16121611 10050803071212110610111013100509090909
1711 213 3 13130704 09090404061208111305110606090504090604
1712 112 5 12121619 11060606070506121304121104071309071106
1713 212 3 11131307 09051005061207100714110909120705070908
1720 000 0 14092008 10070604081307110607091012071008060708
1723 124 1 11181812 10061206080807060703071006090705080908
1727 212 5 10131418 091010101110100909111111010090710110708
1730 212 3 12171313 131315131513111115151111515151513151113
1747 111 4 19171622 13121212121212120911141211111108121211
1752 111 5 10141319 11060513091408080712141012111310111306
1309 211 4 17131520 09071112131413121012131212111011121312
```

```
6003 213 3 12141112 09100513071113111107131312141313121311
6005 213 3 04040307
6006 113 2 14181606 14131306121103111105151409121107081512
6007 113 5 14141709 061111151515131111111150715111515151515
6008 213 4 11161615 11130913141514131015151414151413151514
6009 123 2 10161810 11111112111512131210140912121513111414
6010 113 3 13062014 11101008091513141110151115141110091012
6012 213 4 13211206 06100807121411131514140910110813121308
6013 213 2 09111713 05071406071510111312110813111010110908
5014 000 0
                    09060603071409120810120511121206080910
6015 223 4
                    07101106131310091513080811151309091309
6050 221 4 17181221
6051 221 2 09131911
6052 111 4 11111723 06031006111210130610050810141207080608
6053 221 5 17161719
6054 211 4 10111617
6055 111 4 14180809
6056 211 3 04161710
6057 121 6 15172010
6666 221 2 14191418 111111112101410101210121313131013141110
6667 132 3 10181816
6668 121 0 16191309
7000 113 3 07151315 12091008091408100906090914141214121109
7001 123 3 16171506 08060804071413121208090915151306070508
7002 113 3 16151911 11111413141412131113121312091309121212
7003 213 4 17121708 11081211111313150813130814141409081209
7004 213 3 10061015 06070404081107120511100612141410090706
7005 113 4 12121608 111012081312101415141211114151412141113
7006 213 4 08141513 09091008121514120910130612091409121110
7007 113 4 10130812 05111211071309131306070410031010090304
7008 123 2 09141312 05031111151106130311130711071411041108
7009 213 3 15161515 11061106091407100813140812070909141407
7010 233 3 12121616 111409060811111140909091015041110090811
7011 213 4 15051105 02061303051510131012110515140810130707
7012 113 3 12141313 14131212121513130712111315151514141412
701 5 223 5 13130411 101209121312131012121311101212131212121
7015 113 1 09171317 12091208111510111308111308111213141412
7015 125 1 09131317 12091203111510111308111213141412111211
7016 (21 3 13101010 13141212121212121210131011121211111212
7013 132 3 07201509 1107120711131414101215101513131313121011
```

APPENDIX F

PERCENTILE FOR TEMPERAMENTS

## DATA DICTIONARY

The explanation for the columns is as follows:

Cols. 1-4	ID Number
Col. 5	Blank
Col. 6	<pre>Gender (Blank = information not provided; l = Male; 2 = Female)</pre>
Col. 7	<pre>Marital Status (Blank = information not provided; l = Married; 2 = Single; 3 = Divorced)</pre>
Col. 8	<pre>Race (Blank = information not provided; 1 = Black; 2 = Caucasian; 3 = Hispanic; 4 = Other)</pre>
Co1. 9	Blank
Col. 10	Age (Blank = information not provided; 1 = 20; 2 = 21-30; 3 = 31-40; 4 = 41-50; 5 = 51-60; 6 = over 60)
Col. 11	Blank
Cols. 12-13	Phlegmatic percentile score (2 blanks = information not provided)
Cols. 14-15	Sanguine percentile score (2 blanks = information not provided)
Cols. 16-17	Choleric percentile score (2 blanks = information not provided)
Cols. 18-19	Melancholic percentile score (2 blanks = information not provided)
Col. 20	Blank
Cols. 21-57	The nineteen spiritual gifts scores, two columns each (A blank in a column stands for zero, not typed; 2 blanks for information not provided).

```
0299 114 3 88236554
0299 212 5 43639149 11061105091413140914101113141111070609
0299 212 5 43639149 11061105091413140914101113141111070609
0301 113 3 43769117 12120610121409111108151410121410121514
0302 132 3 61428333 131406111413101112101314111111209131314
0303 222 2 55479164 090813111312091412121213141415061111112
0304 121 2 81894122 13080905081004050505121006061005080912
0305 112 3 68709117 10060805061105060907131209050306071110
0306 112 2 88709759 11080906101008121211131109140607111309
0307 112 3 28476522 09050703060805090508091010060503050908
0308 222 2 03039796 09071109121308110510091009080906110711
0309 122 2 94634133 12101009121109091109101312091107111012
0310 122 2 94827438 12090707120907120907121212101305100911
0311 212 4 38329705 15111106101109140709131203030308111211
0311 213 2 61709144 12070708121410111508091409080609110812
0312 224 3 49479733 111111091214131210110812111111212101112
0313 213 2 61636538 12111507121112101207141408101310111213
0314 124 2 81239774 11090809111211140807101112111108101108
0315 114 2 81708364 11091108101309100908100908101407080811
0316 123 2 74949744 11110908071106080708131107090807101412
0317 113 4 74709733 111110091011091107101213111111110121310
0318 124 2 55583564 10131010091212080708111010121209091008
0319 121 2 61473549 12080805081305100605060804080908111107
0320 114 2 49277482 13121410131410131115131213101310111011
0321 113 4 38528354 1311111011101010101212110911121314111309
0322 123 2 61894844 15131314121511100712151309071213131412
0323 113 3 49949164 14111012141310131210131511131114131213
0324 113 3 49896569 03060704050304070407050307040503040407
0327 113 3 43521438 12111110101008101409090810120911131412
0332 124 2 68151169
0333 114 6 88768308 11111111131412121311131414131313131213
0334 212 6 38427478 05030604081109151411100711070805050505
0334 222 2 98479708 120912051107101207111213111111210121512
0342 112 4 94097478 12101004121109110708101115090910101311
0345 122 2 68371982 12070606111206141010120808120812101107
0347 211 4 68529133 09101013111512151412111013121212121212
0352 111 3 74709133 09111009101406111112131014141312111112
0353 111 3 98586501 13091007131313141008111310110807091011
0355 112 3 88948328 12090806121109101210101108111008121212
0356 111 5 49091144 09030606111311141109091011101408090604
0356 112 3 38470286 08120909091010100911110710090911111110
0357 231 5 94636517 11090813121413121113131013131510111311
0357 113 2 33767459 12110915111409130911151110111315131514
0358 111 3 88638312 10090910101213130813131011131212111211
0358 113 2 94899712 13111108111112101312141312141014121410
0359 123 2 61764869 14131511101408121210151413091414131512
0359 221 2 49197493 14091003101312131205110904101010100710
0360 221 1 61427422 10070906101206091106071011110708110412
0361 211 3 28521944 08031106121009080908090807070506071010
0362 211 3 68122454 04070706071407130707080607061006050608
0363 231 3 38828344 09041006101309140813101107090509090609
0364 211 3 61474874 080711081312101212110910111130808110910
0364 111 3 74759193 11070405071110100706111013121108131309
0365 [11 3 74768312 14091209111413140810131112121412121209
```

```
0367 222 2 06199193 09091207101407150911081013131508120912
0368 213 3 61589764 09101310121511091013141414111105110815
0369 222 2 18526538
0370 114 4 55091944 12131010131411111208141210131513131513
0371 222 2 61767438 10081106111007100908111107100606100710
0372 122 1 68630282 1013100911110909100912121212121109121310
0373 122 2 88829712 09111208131312120910150811111409151413
0373 112 2 94637417 12050605081106100804090911081006070910
0374 222 2 38473533 06071003080805151210040715151104100414
0374 112 4 49527454 10081208081308140808111211131513121413
0375 122 2 88898328 14120907121309110909141512091215111211
0375 112 2 14899178 10111006091309090908141212121212091310
0376 222 2 55634138 08070708141109141411120907140807141211
0376 112 2 33763538 120910111012091013111510111111311111209
0377 221 2 55978364 15121210111511111513131309131411131111
0377 112 2 49943554 12111209091208101109111109100911121210
0378 122 2 94769722 09050706060908090609080506060506060806
0379 222 2 81898312 11051107101009101412100908060604110907
0379 113 4 98429799 12100707090907101109111010081111080908
0380 221 2 28765628
0380 112 2 68636559 12121105131208101011141111101313151211
0381 121 2 68766564 14151308151312101106151513121010101015
0382 122 2 94943517 12091010111208090908091107131007120911
0382 122 3 94829102
                    10100805071109100811100711101011091009
0382 111 6
0383 221 2 091 22982 08080705080907090707080803060407070607
0383 122 3 23239717 12080609101306141012121015121009111407
0384 112 2 81978338 121312101213101111081112151210111111012
0384 112 2 94471117 09100505110803110906121109071010101407
0385 122 2 49199169 09041004090909100708081207101107060812
0385 212 2 49898312 13101110131513130910130913091204121314
0386 222 2 94763528 11061204071412111011091213121504100912
0387 222 2 86898302 070611081214071011101111010111207100511
0388 242 5 88947428 15100910141508091513111313131313151214
0388 112 2 74471986 091009081209091109051111111111211121010
0389 221 3 28476574 08060609111109131309080909111106090906
0389 212 2 49827433 11121109120908091110101311110712111311
0390 112 2 98527422 08081004150711110707091211110808150510
0391 112 2 74236528 07071104140906101008121310091312110710
0391 112 2 38589793 101208031110050906070909121310131111009
0392 122 2 88233544 07131308120910090810141011101207110707
                    13120507141108131105131313071407141510
0392 221 2
0392 112 4 74769133 11110605091008091205111307040511111110
0393 122 2 94829112 13090807081309120812101009101007101009
0393 213 2 55706549 10111207121211140912111112111012141011
0393 213 2 55706549 10111207121211140912111112111012141011
0393 112 2 94589138 12131111091109121110131314141513121310
0394 113 3 81424833 09121106071511111311090815081009060204
0394 113 3 81424833 09121106071511111311090815081009060204
0394 132 3 81708308 10121007120707100909111212140808111108
0395 213 3 74475633 09120707061511121211120815041010060405
0395 213 3 74475633 09120707061511121211120815041010060405
0395 112 2 81593544 11091007091209100610101212090909101111
0396 223 2 61374112 091007060912091013141210121111110091111
```

```
0450 221 2 81639744 10080908121107061009081109090607080810
0451 223 2 23829198 12061506111108130808090911151206100914
0452 222 2 55474849 07071006121110111212110811120807110812
0455 112 2 38422974 14101003071009110809141406080610101413
0456 232 2 18639790 13110707101006080808091106050611111110
0457 111 5 81765608 10080808101310111412100902100910120808
0457 112 2 81828312 11111410121409121214111213121409121113
0458 224 2 33192474 07080807081008120810110709090910110910
0458 122 2 28946528 10131106091204061008141207100111121209
0459 224 2 55078382 11081210091312120908070912111511120710
0460 211 6 98233505 09060906141508131110091108121209141010
0461 221 6 74160544 09030903031310140804920605080807080608
0464 111 3
                    07040604040909120406060509100907060505
0465 223 2 68947449 15071105091407090807121208081010120613
0467 223 2 33525664 08080910111110101010100809100708081011
0468 221 2 14090808
0469 224 2 14190502 09091009090809090909090709110909090909
0470 221 2 23271954 09080907080910080909101009061009070909
0471 224 2 68527454 10091412131513110915141214121511151415
0472 222 2 81896508 11061008131007121410060807121108130612
0473 222 2 74899144 11081107121108091109091309090807100712
0474 223 2
                    09041205081211150910100713101104090511
0475 224 2 43829159
0476 221 2 88525617 10091308091408111108100909111207100912
0477 224 2 49191149 100810081111111100910111012101008091010
0478 224 2 09523590 07051007091510100714100913101110120808
0479 221 2 74071178 05031403141410120708070908110607120611
0480 221 2 74769149 08031307091109080908121113151113110712
0483 222 2 68709174 12080905070608070711090905070607061110
0484 223 2 18478374 13091309071109101307121215090706090910
0485 221 2 33271422 06081110110910110709110907080610100608
0487 221 2
                    09051307121005091209051004090609100810
0487 223 1 38522459 0905130712100509120905100409060910081.0
0487 211 3 68708354 13090613131513121311151514131509141513
0489 221 1 61527493 05050504080703061004090503070903070608
0490 222 2 09941493 12070706090909101510081103120509071408
0492 223 2 74375644
0493 222 2 68199798 05061007121208121113080809100808120911
0494 222 2 43977469 11061203120907110906071213141007050613
0495 222 2 81279169 06051203140706100908111113110407121114
0496 212 5 43949138 101111121013131111111131109110912121311
0497 222 2 43977486
0498 221 2 61588328 10100908101008080707060807070606070607
0499 222 2 14527474 10041105130905070611060806110303110410
0500 223 2 14768359 09071204091105070909081113131503100911
0501 222 2 33199193 11060904151107151007030714111505100511
0503 222 2 38942949 13071205091408091214111313141105130812
0504 222 2 74828308 12090906101009121408091112101208110811
0505 221 2 55271478 08061008101207080910071010121009090908
0506 221 2 74705633 10070807080906100910080710070807060708
0508 222 2 81429712 13101503071407130711120913061209040513
0509 223 2 61767422 10111009111210101310081008130509101109
0510 224 2 14058399 06050803120307100906091305111105130812
0511 224 2 74942905 10080711140809071111091209110808091114
```

```
0625 202 0 68899738 14101005111511101214141206060304091513
0626 102 0 28949774 11111311131413141314121210140607140812
0627 202 0 43705664 08071208121512141415141208120507111010
0628 102 0 23427474 11060903090908101004051007070303050409
0629 113 3
                    12091009101512110911141313141211101311
0629 202 0 55825633 13121412111514111214150913140912111109
0630 202 0 38827482 09081207141207091110101010090906110812
0631 102 0 74120869 05090903091111130509150711090307070911
0632 213 3
                    11061109121315131110091310141105110912
0632 102 0 81584978 11051008101309110708090915120707090909
0633 213 3 55324133 10120810151513141511100813151312141011
0633 202 0 18424154 07051004071207080503080606030604040505
0634 213 2 68765549 11090909081109121009100909101011091108
0634 213 2 68756549 11090909081109121009091010110911091108
0634 202 0 74323522 08040904111006111309100909091004090711
0635 102 0 74584193 081010081208071308061211111100707110812
0636 213 2 81639717 12110710080712111508080910101309071112
0636 202 0 38701917 07040806081210091212060710100708090706
0637 124 1 38820559 07061205100708091103050706081006080410
0637 102 0 74826512 09081406110909080805111109050705100911
0638 213 3 23129798 13080703081108130706101214061407101113
0638 102 0 43424882 11100807081111101212120812080908090907
0639 111 2 03160208 11131010121410110908111210121209121409
0639 202 0 38970164 12081106130906081110091208040405070410
0640 202 0 38371454 07040603110608121305030803060303060308
0641 112 5 68529101 07051108091412130609080908151006090909
0641 202 0 33371986 07051009111308130913130813131507081311
0642 212 4 38230549 03030805041108120408060306080507040304
0642 102 0 14054182 05041003050706100405080708090806060606
0643 202 0 18940882 08050805090605080909050407070505060506
0644 122 5 94428305 10071307101513150811131211111309120912
0644 202 0 33371986 07051009111308130913130813131507081311
0645 232 3 03896586 11081308151512081010151014151508151515
0645 202 0 88638322 11070805091111120610111208070406071009
0646 212 2 74429138 12080805121506131208131413141006100710
0646 102 0 23329774 08080607101110120409091005040604080610
0647 213 3 18587482 09091212111511110810141009091013111211
0647 102 0 81589174 13091103111410120313080810070310090511
0648 213 3 49587490 13030507121512150610111010101507111008
0648 202 0 98236517 10051305101511120413100910070511090810
0649 212 4 18007454 08060909091007091006090707031004060505
0649 102 0 55474186 04040806090606120808070813131007090708
0650 121 2 61637464 06071013121310121211121309141313151411
0651 222 2 18329790 11090709141208131306101108090406151311
0652 211 2 49891974 08071205081311130511081106110811131207
0653 111 4 94949722 14121311111310101010151415131415141515
0654 224 2 09192978 08060807091107100806100708080807071108
0655 122 2 33275659 09091103151107150907050909070303070310
0556 231 5 74588338 131008081214121113141211101312071111109
0661 222 6 38095674 05040707051210110608100610070606060706
0662 212 3 43076593 09051104091211150506081003060309090910
0667 112 3 49477493 12101211131208131111101313131009131112
                    03080803111511150715110712110307070707
0675 212 5 55829722 09081107111210120910090908110609120907
```

```
1027 223 i 38702974 09051205121111111011100915091208100809
1028 123 1 33948338 13081110131412141110121310121009101009
1029 113 4 98762417 08060905081310071006070707081008081011
1030 123 1 28470564 05051006081109110906090710110804050708
1031 223 4 38234869 11100911111109071212140815121412151512
1031 213 5 23631133 15101005081413111513090908051213130608
1032 213 3 28522459 06050707101508100908110909091005110909
1033 123 1 28320496 11100907111411100605121110121309091012
1034 223 1 68899764 12091308141108110813091009081109120810
1035 113 2 09589133 10121010101211091211140912091013111109
1041 123 1 38234886 05041306051409100911090509140612061011
1041 123 1 38234886 05041306051409100911090509140612061011
1042 213 3 43374859 04030705071509110911080713071110081006
1042 213 3 43374859 04030705071509110911080713071110081006
1043 123 2 81524144 10111008101512120912120914111413101210
1051 112 3 94826582 13121313131311091210151210060813141515
1052 212 3 88972486 05030603040906110504060405030306050403
1053 212 4 55479154 08080904081313140513121013120809100710
1056 212 2 43090238 06030805041307120508080410110706050505
1057 222 1 88949108 14051205101211110710091210120606070508
1058 232 4 38977428 11050805111011120712091011141105110707
1059 132 4 74828396 15141413141411151111131315121512141315
1061 112 5 98769196 13141413141515151414151415141515151514
1080 111 3 55321996 11141103150811120612151315140708141014
1092 212 3 81632464 09081007131211090812090809130909120811
1114 122 1 55323544 06041004071013130508120811120606080807
1115 112 3 61428369 12111210091410090710151014121315111308
1119 231 2 61948338 13101210121411101009121213121012121212
1131 212 5 61586502 11091007111414130913121012121011121109
1138 212 6 49706538 08060907091412121013110813130909120909
1139 112 5 33896544 10091006071207151009120909071208080812
1143 112 4 43329733 10031003050406090503030803081005060309
1145 122 2 09054193 08040905040613151515090806140605040410
1147 212 3 43070569 07051005081307140711120610090706090512
1148 222 1 23091954 06031003051007111005100708110906060508
1148 212 3 28128364 05050803071110130809110805050705090609
1149
                    09061103050612120610110910080906100608
1150 122 2 98941412 10090707110907101109081210111210081011
1151 112 6 38194882 10050809081109100709130914091306091108
1152 112 4 98379105 09060905081205110706080813111405080506
1165 112 4 43529178 10050909140910151309080809131110130608
1166 232 3 49166574 03031004041410120309080612100704050505
1167 212 3 88639133 14071008091212141012131014120908121110
1158 214 6 23896505 11050609111413110815120915141207151111
1158 113 4 81427438 13080909111512131215121115151513131208
1169 114 6
1159 112 6 81371917 04030603061311110908120808081304090506
1169 112 5 74123554 10071008081112131010121011101112101109
1170 232 3 09193586 08041004070908130807050612080610080508
1171 232 3 43477444 08030703071109120808060508090704070708
1172 123 2 18474890 07040803070408070703040807090605040307
1173 212 5 94376517 04030803061313131112130709110805090708
1174 222 1 68977433 14111404140804071005061206150607100411
1176 122 3 94472908 11100906131307150909131208131210121312
```

```
1177 212 2 74479717 10061203051208090612080909080309060508
1178 231 4 06756564 12071210111509131512090812120705120712
1179 112 4 68169133 08030903040911110610040714111405050406
1179 211 3 81589117 07070604081311120809101309130912071010
1180 213 4 33275659 10040803051410151007140715081406070611
1180 112 2 88169133 11111007061109120907121011091008061210
1181 122 1 18327444
1184 212 2
                    10090906121009121010081110120809110611
1185 122 2 68196549 08090704080906050909110707061104070811
1186 222 2 74474164 10131006130907131311081106100708121212
1190 122 2 98638317 12091210141309090808121315151413121113
1191 222 1 68946533 13090805101308080808121213121110100909
1193 122 2 88703538 11081308121109130412141112101306121310
1195 222 2 43524149 11100908111414131111101013101110111009
1197 122 2 61896533
1294 211 4 38635674 07121208101313140907131212081110111211
1318 211 4 43582469 08060907061410130809090909100908081106
1319 121 6 74709744 11070906071409100708121109100705060709
1375 112 2 88765612 14101110101408131410131215141515121311
1376 122 3 81891422 11131006121009101107110909091008121012
1377 112 2 43166578 10141005101005070505140708080613091410
1378 112 2 94636533 111311051!1109121111101212131112111111
1379 112 2 94522902 120809071211121211101211100913151111110
1380 112 2 88700805 08090903060811130605090915131409050607
1381 112 2 88895612 12121008121012091209101211131212111011
1382 112 2 88829128 12141007111409091009131209100914121313
1383 122 2 61892922 10100910131213121511120914141407151108
1386 122 2 49522944 08090805081407100910120712081111081110
1387 112 2 88767417 13111009091409120909131113130914121211
1388 112 2 68705644 13101006061312070812151012111409101210
1389 112 3 98639102 12121110100909091209121110090810101010
1392 112 2 81429128 11121405101308101106141310131410131409
1393 112 4 38827438 11091107091208101513121109101111121109
1395 111 3 88974133 12111111151514141110101308121213141312
1398 112 2 94525628 10091010120909131008121208120812121112
1399 112 2 94326538 11131005091412130708141011101314071110
1401 114 3 06094878 09080809090910101009141011111209111311
1407 112 2 74768322 13130906081106100909131112090812111310
1408 112 2 94705522 1209100911120811100911101110111101110
1409 122 3 74528328 13101208111312131109141210111315131412
1410 112 2 74894808 11121208121313091110131314131411141412
1411 112 2 74639793 1211111111131312111214131213121212121
1412 122 2 81329112 111111004091206110607121114070713080911
1413 112 3 09234898 11121108111212121011121212111112121212
1414 112 2 94752928 10111215101308101108101115131415131311
1415 112 2 94899105 13100807071109090908141110091012111208
1417 122 2 94584808 09120911110606100706121009100612101210
1418 112 3 98328308 111111007110907101112131010080614121110
1419 222 3 49587428 11101312121209101212121008091010111111
1420 122 2 88826517 13121011121011131314151412131211121411
1424 [12 3 98424][7 10091006131209100805111315091110101011
1427 112 2 94898301 11130907111010080907121208080811111411
1428 114 2 88896508 13121010121410101009141111071111121310
1429 112 2 81767405 12110908111209090808141211091011121210
```

```
1430 112 2 88829712 11131006111109120909131109090712101111
1432 112 3 06429793 11121011101113121309121212101110121210
1433 122 2 28940869 08110906101207111109131014101210101310
1435 211 4 68426586 07081007061210110512090706080608070809
1438 131 4 68327422 11081012091208121010140914121212091410
1441 222 1 28529159 08031007081514120711140911110907101106
1447 211 5 43582954 07090709071509120911100911100910090807
1449 211 3 01010101 11100911111415111515150713141312141211
1451 211 4 33325674 07030505081010101105130909140306070506
1453 211 5 88949782 14111113141514151514151415151406151514
1475 211 4 68894882 03030705041211121209040503100505060504
1476 111 6 94584838 09110909121312101212091109110407101110
1492 111 4 43764859 12030704090705150304050705130705060308
1497 211 6 01897486 08030805131109120513090809110403120807
1498 211 4 81709178 14121311111510111112151312111109121513
1500 221 2 88162454 08070808110911100906111112101208131313
1506 111 5 98829196 15111212131512131009151414131410111513
1515 111 6 68472454 10071205080712131407101406151109081012
1516 121 2 81829774 13130911121411131014141412141514131510
1525 211 5 81769144
1526 | 11 | 3 | 88476574 | 1011101108111212091113121212121211121312
1548 111 5 68768364 141111111131414111113151214141311111312
1576 122 2 98702922 08100907100806090808110906110912111109
1577 132 3 09196582 09050705111410140705091215131009110909
1578 112 2 68899154 13131110121210101210141508070712121412
1579 112 3 98704112 12121107131308090809101210101213121211
1585 111 6 88825682 08030704101410120713070912140809111006
1616 231 5 88637433 14081112121513130815121015151512141112
1619 122 2 94198328 10121007151407101110151415111411141411
1620 112 2 88635617 101111091010121111111141314151113121312
1621 112 2 94762412 07091004091410100608111113070709091013
1625 113 4 61706522 15150714101511081310131309071315151512
1629 112 2 81764101 120909071013081212111412121111113111310
1632 112 2 74375617 090910080911080909081209111011111101009
1633 112 2 28427469 131111091013081108101211111070911091212
1644 122 2 74899149 11101010091307100709121213080906111110
1656 221 4 88478374 07030506111212150511110805110906100709
1666 111 3 68766578 10070706071009090807090808090906070909
1670 112 4 88527438 13131012141010130908151206081014131511
1671 212 2 09766593 07041203121409120711120808040904090810
1672 222 1 18128393 09071006101107120806101009110607080509
1673 242 6
1702 113 3 33474169 15091207091311110714131512071211121313
1708 212 4 81426549 10050803071212110610111013100509090909
1711 213 3 94761112 09090404061208111305110606090504090604
1712 112 3 55426586 11060606070506121304121104071309071106
1713 212 3 49474128 09051005061207100714110909120705070908
1720
           68279733 10070604081307110607091012071008060708
1723 124 1 49768354 10061206080807060708071006090705080908
1727 212 5 43474882 091010101110100908111111010090710110708
1730 212 3 55708382 131315131513111115151115151513151113
1747 111 4 98706596 13121212121212120911141211111108121211
1752 111 5 43524186 11060513091408080712141012111310111306
1809 211 4 88765690 09071112131413121012131212111011121312
```

```
1816 231 3 49899133 11081110121414151212121012131009140913
1836 121 2 68371117 06051207071111100607130714121005111112
1856 212 3 68828386 06100609151309151011101307120702131213
1861 211 4 98529708 10030810091311150315141511080903091310
1869 113 3 38524169 15131311141414130914141315151512141514
1877 231 3 43589182 14091311091409110711151014141411111313
1881 112 2 68827422 11110904111108051109101210120712111513
1888 2
           49379178
1890 212 3 51422433 07070908071105110912100310100305080408
1891 212 6 81947402 13100912151514131014131213131409141313
1892 112 6 88427433 09090909091210110910101011120908100911
1893 212 4 81947454 11081005091512141315111114081311110810
1894 212 5 49120501 11051108101411110913090913090709150713
1897 112 3 98709108 080512071212131111111110903131409100810
1900 221 4 81524128 13060909121406121112131308101108141212
1900 222 2 43896538 11101003081309110806111107131303061113
1901 211 3 43585638 13100909101412111111131314101409141410
1901 222 2 74236559 12111005121208121112121209121211120910
1901 222 2 23471474 11101107131312131110121209151109130809
1902 121 2 49522469 10090907131508131211080711061011100807
1902 122 2 88994144 10131006101206120609151012131403111514
1903 122 2 01010101 10091204071410090614141010081405090908
1904 122 2 68898344 121211091113101211121211120912111111010
1905 122 2 81581928 101012051110081211091010101000810111010
1907 122 2 23633564 12121007111007101109131408101013121212
1909 112 2 81825601 13121006111208110908121013110615101209
1918 112 3 81427433 12081008081009111008131112101115091210
1919 222 2 33272933 09010802090606120904041002080403040908
1920 222 2 33637438 091011071211101010101111107100909121210
1921 222 2 23169174 07050603111004121008050607140605090508
1922 112 4 23974117 13120706110908071008071113111409131211
1925 112 2 23634893 11101009110908090709111108121209131112
1926 112 2 98273508 110706080913111205071310110906111111008
1927 112 2 81164859 08050805100906090809121206110807111308
1928 212 2 06094886 11051903120506060303081103110304110807
1929 112 3 43762444 14140909121410101310141011111010131509
1930 212 3 91237412 08091308121209110811121211111509131110
1932 212 2 55324838 10100503110711071211091504090810121310
1933 112 2 81522969 10111006090612121208091209100512121211
2000 113 3 43099722 09030903071411131107091008091307070810
2001 112 4 43239759 11081006090710140705091303061206091012
2002 212 5 68769764 08050805081011151110131009061407080707
2004 213 2 55521459 10060506130707140803030806031106120507
3001 111 3 98371964 10091106070707141007130807101009101210
3002 111 3 61707438 10100904071011111008121113101110111009
3003 131 5 98979122 13131211141212121211131210121211131413
3004 211 3 88709702 110711101011101114121212131109111111
3007 221 4 88709112 09110906141107151411110805091311131109
4001 212 4 55634828 12071003081409100809101215080603080512
4004 222 2 55977474 13101009151409120811121413090708141312
4007 233 3 81765633 1110141515151211111131413131010111111212
6000 243 5 88194859 111111101015141511141511151513131111114
6001 213 2 43525644 06091105141515110612150807151513111309
6002 113 2 33637493 11141011121211111010151014141311121311
```

```
6003 213 3 55522954 09100513071113111107131312141313121311
6005 213 3 14090228
6006 113 2 68766522 14131306121103111105151409121107081512
6007 113 5 68527438 06111115151513111111150715111515151515
6008 213 4 49636569 11130913141514131015151414151413151514
6009 123 2 43638344 11111112111512131210140912121513111414
6010 113 3 61169764 11101008091513141110151115141110091012
6012 213 4 61943522 06100807121411131514140910110813121308
6013 213 2 38377459 05071406071510111312110813111010110908
                    09060603071409120810120511121206080910
6014
6015 223 4
                    07101106131310091513080811151309091309
6050 221 4 88763593
6051 221 2 38479149
6052 111 4 49377498 06031006111210130610050810141207080608
6053 221 5 88637486
6054 211 4 43376578
6055 111 4 68761438
6056 211 3 14637444
6057 121 6 74709744
6666 221 2 68824882 11111112101410101210121313131013141110
6667 132 3 43768374
6668 121
           81824138
7000 113 3 28584169 12091008091408100906090914141214121109
7001 123 3 81705622 08060804071413121208090915151306070508
7002 113 3 31589149 11111413141412131113121312091309121212
7003 213 4 88427433 11081211111313150813130814141409081209
7004 213 3 43162469 06070404081107120511100612141410090706
7005 113 4 55426533 11101208131210141514121114151412141113
7005 213 4 33525659 09091008121514120910130612091409121110
7007 113 4 43471454 05111211071309131306070410031010090304
7008 123 2 38524154 05031111151106130311130711071411041108
7009 213 3 74635669 11061106091407100813140812070909141407
7010 233 3 55426574 11140906081111140909091015041110090811
7011 213 4 74122917 02061303051510131012110515140810130707
7012 113 3 55524159 14131212121513130712111315151514141412
7013 223 3 61470449 10120912131213101212131110121213121210
7015 113 1 38704178 12091208111510111308111308111213141412
7015 123 1 38764178 12091208111510111308111213141412111211
7016 121 3 61322444 131412121212121210131011121211111212
7018 132 3 28895638 11071207111314141012151015131313121011
```

BIBLIOGRAPHY

## SELECTED BIBLIOGRAPHY

- Adams, Jay E. The Christian Counselor's Manual. Grand Rapids, MI: Baker Book House, 1973.
- Adcock, C. J. "Thorndike Dimension of Temperament." Seventh Mental Measurements Yearbook. Vol. 1. Edited by Oscar K. Buros. Highland Park, NJ: Gryphon Press, 1973.
- Agrimson, J. Elmo, ed. <u>Gifts of the Spirit and the Body of Christ</u>. Minneapolis: Augsburg Publishing House, 1974.
- Allers, Rudolph. The Psychology of Character. Translated by E. B. Strauss. New York: Sheed & Ward, 1943.
- Allport, Gordon W. <u>Pattern and Growth in Personality</u>. New York: Holt, Rinehart and Winston, 1961.
- Aquinas, St. Thomas. <u>Summa Theologiae</u>. New York: McGraw-Hill Book Co., 1943.
- Arn, Win, Ed. <u>The Pastor's Church Growth Handbook</u>. Pasadena, CA: Church Growth Press, 1979.
- Pasadena, CA: Church Growth Handbook. Vol. 2
- Aultman, Donald S. <u>The Ministry of Christian Teaching</u>. Cleveland, TN: Pathway Press, 1966.
- Babladelis, Georgia; Kay, Deaux; Helmreich, Robert L; and Spence, Janet T. "Sex Related Attitudes and Personal Characteristics in the United States." Internal Journal of Psychology 18/1-2 (April 1983):111-23.
- Baird, William. <u>l Corinthians</u>. <u>2 Corinthians</u>. Atlanta: John Knox Press, 1980.
- Barclay, William <u>The Promise of the Spirit</u>. Philadelphia: Westminster Press, 1960.
- Barnes, Roland S. "The Miraculous Gifts of the Holy Spirit--Have They Ceased?" The Journal of Pastoral Practice. 7/1 (1984):18-33.

- Beet, Joseph Agar. A Commentary on St. Paul's Epistles to the Corinthians. 2nd ed. London: Hodder and Stoughton, 1883.
- Berger, Gaston. <u>Caractère et personnalité</u>. Paris: Presses Universitaires de France, 1971.
- . Traité pratique d'analyse du caractère. Paris:
  Presses Universitaires de France, 1950.
- Bernard, Larry C. "The Multidimensional Aspects of Masculinity, Femininity." Journal of Personality and Social Psychology 4/4 (October 1981):797-802.
- Bigge, Morris L., and Hunt, Maurice P. <u>Psychological Foundations</u> of Education. An Introduction to Human Motivation, Development, and Learning. 3rd ed. New York: Harper & Row, 1980.
- Blitchington, Peter W., and Cruise, Robert J. <u>Understanding Your</u>
  <u>Temperament: A Self-Analysis with a Christian Viewpoint.</u>
  Berrien Springs, MI: Andrews University Press, 1979.
- Block, Jack. "Eysenck Personality Questionnaire." <u>Eighth Mental</u>
  <u>Measurements Yearbook</u>. Vol. 1. Edited by Oscar K. Buros.
  Highland Park, NJ: The Gryphon Press, 1978.
- Boland, Barbara K. "Predicting Counselor Success in Practicum from Selected Measures of Personality, Interest, Temperament, and Open-Mindedness." <u>Dissertation Abstracts</u> International 34/9-A (March 1974):5615-16.
- Boukydis, C. Zachariah, and Burgess, Robert L. "Adult Physiological Response to Infant Cries: Effects of Temperament of Infant, Parental Status, and Gender." Child Development 53/5 (October 1982):1291-98.
- Braun, Noel J., and Knoche, Michael. "Prediction of Job Performance Using Psychological Appraisal Testing: A Validity Study."

  Australian Psychologist 13/3 (November 1978):379-89.
- Brock, Arthur John. <u>Galen on the Natural Faculties</u>. Cambridge, MA: Harvard University Press, 1963.
- . Greek Medicine. New York: E. P. Dutton & Co., 1929.
- Brown, Ina Corinne. <u>Understanding Other Cultures</u>. Englewood Cliffs, NJ: <u>Prentice-Hall</u>, 1963.
- Bruning, James L., and Kintz, B. L. <u>Computational Handbook of Statistics</u>. 2nd ed. Glenview, IL: Scott, Foresman, and Co., 1977.
- Burton, Robert. The Anatomy of Melancholy. New York: Tudor Publishing Co., 1941.

- . The Anatomy of Melancholy. New York: Frederick Ungar Publishing Co., 1979.
- Buss, Arnold H., and Plomin, Robert. A Temperament Theory of Personality Development. New York: John Wiley & Sons, 1975.
- Calvin, John. <u>The Institutes of the Christian Religion</u>. Translated by F. L. Battles. Philadelphia: Westminster Press, 1960.
- Cameron, James R. "Parental Treatment, Children's Temperament, and the Risk of Childhood Behavioral Problems: 1. Relationships between Parental Characteristics and Changes in Children's Temperament Over Time." American Journal of Anthopsychiatry 47/4 (October 1977):568-76.
- . "Parental Treatment, Children's Temperament, and the Risk of Childhood Behavioral Problems. 1. Relationships between Parental Characteristics and Changes in Children's Temperament Over Time." Annual Progress in Child Psychiatry and Child Development, 1978, pp. 233-44.
- . "Parental Treatment, Children's Temperament, and the Risk of Childhood Behavioral Problems: II. Initial Temperament, Parental Attitudes, and the Incidence and Form of Behavioral Problems. American Journal of Anthopsychiatry 48/1 (January 1978):140-47.
- Carey, Gregory, and Rice, John. "Genetics and Personality Temperament: Simplicity or Complexity?" Behavior Genetics 13/1 (January 1983):43-63.
- Carey, W., and McDevitt, S. "Revision of the Infant Temperament Questionnaire." J. Pediatrics 61/5 (1978):735-39.
- Chess, Stella, and Thomas, Alexander. "Temperamental Individuality from Childhood to Adolescence." Annual Progress in Child Psychaitry and Child Development, 1978, pp. 223-31.
- Cohen, Jacob. Statistical Power Analysis for the Behavioral Sciences. New York: Academic Press, 1969.
- Cohen, Jacob, and Cohen, Patricia. Applied Multiple Regression/ Correlation Analysis for the Behavioral Sciences. New York: John Wiley & Sons, 1975.
- Cornell, Merritt E. <u>Miraculous Powers</u>. Battle Creek, MI: Steam Press, 1875.
- Cox, David. Modern Psychology. The Teachings of Carl Gustav Jung. New York: Barnes & Noble, 1968.

- Cruise, Robert J., and Blitchington, W. Peter. <u>Temperament Inventory</u>. Berrien Springs, MI: Andrews University Press, 1977.
- Cruise, Robert J.; Blitchington, W. Peter; and Futcher, W. G. A. "Temperament Inventory: An Instrument to Empirically Verify the Four-Factor Hypothesis." <u>Educational and Psychological Measurement</u> 40 (1980):943-54.
- De Laszlo, Violet Staub, ed. <u>The Basic Writings of C. G. Jung.</u> New York: The Modern Library, 1959.
- Developmental Psychology Today. Del Mar, CA: Communications Research Machines, 1971.
- Diamond, Solomon. Personality and Temperament. New York: Harper & Brothers, 1957.
- <u>Discover Your Gifts.</u> Workbook, 2nd ed. Grand Rapids, MI: Christian Reformed Home Missions, 1981.
- Dodrill, Carl B. "Personality Differences between Christian and Secular College Students." <u>Journal of Psychology and Theology</u> 4/2 (Spring 1976):152-59.
- Downey, June E. The Will-Temperament and Its Testing. New York: World Book Co., 1923.
- Dudley, Roger L., and Cummings, Des, Jr. "A Study of Factors Relating to Church Growth in the North American Division of Seventh-day Adventists." Berrien Springs: Andrews University, The Institute of Church Ministry, 1982.
- Duquoc, Christian, and Floristan, Casiano, eds. Charisms in the Church. New York: The Seabury Press, 1978.
- Eastwood, Cyril C. The Priesthood of All Believers. Minneapolis, MN: Augsburg Publishing House, 1962.
- Edwards, Thomas C. A Commentary on the First Epistle to the Corinthians. London: Hodder & Stoughton, 1903.
- Eliasz, Andrzej. "Temperament and Trans-Situational Stability of Behavior in the Physical and Social Environment." Polish Psychological Bulletin 11/3 (1980):143-53.
- The Encyclopedia of Psychology. Guilford, CT: DPG Reference Publishing, 1981.
- Epp, Theodore H. The Other Comforter. Lincoln, NB: Back to the Bible, 1966.
- Ervin, Howard M. <u>These Are Not Drunken As Ye Suppose</u>. Plainfield, NJ: Howard M. Ervin, 1968.

- Eysenck, Hans Jurgen. <u>The Biological Basis of Personality</u>. Springfield, IL: Charles Thomas, 1967.
- Paul, 1947.

  Dimensions of Personality. London: Routledge and Kegan
- . Eysenck on Extraversion. New York: John Wiley and Sons, 1973.
- \_\_\_\_\_. "The Inheritance of Extraversion Introversion." ACTA
  Psychologia 10 (1956):95-110.
- \_\_\_\_\_. <u>Maudsley Personality Inventory</u>. London: University of London Press, 1959.
- Basic Psychological Processes. New York: Wiley-Interscience, 1971a.
- . Readings in Extraversion-Introversion: Fields of Application. New York: Wiley-Interscience, 1971b.
- . The Scientific Study of Personality. New York: Macmillan Co., 1952.
- John Wiley & Sons, 1960.
- , ed. <u>Readings in Extraversion-Intraversion. Theoretical</u>
  <u>and Methodological Issues</u>. New York: Wiley-Interscience, 1970.
- Eysenck, H. J., and Eysenck, Sybil B. G. <u>Eysenck Personality Inventory</u>. San Diego, CA: Educational and Industrial Testing Service, 1964.
- Eysenck, H. J., and Eysenck, Sybil B. G. <u>Personality Structure and Measurement</u>. San Diego, CA: Robert R. Knapp, 1969.
- Feiring, Candice, and Lewis, Michael. "Temperament: Sex
  Differences and Stability in Vigor, Activity, and Persistence
  in the First Three Years of Life." <u>Journal of Genetic</u>
  Psychology 136/1 (March 1980):65-75.
- Ferguson, George A. <u>Statistical Analysis in Psychology and Education</u>. 3rd ed. New York: McGraw-Hill, 1971.
- Ferguson, Larry N. "Issues in Missionary Assessment." <u>Journal of</u>
  <u>Psychology and Christianity</u> 2/4 (Winter 1983):25-29.
- Finding Your Ministry. Kansas City: Church Extension Ministries, Church of the Nazarene, n.d.
- Ford, Leighton. Good News Is for Sharing. Elgin, IL: David C. Cook Publishing Co., 1977.

- Fordham, Frieda. An Introduction to Jung's Psychology. Baltimore, MD: Penguin Books, 1953.
- Fransen, Peter, S.J. The New Life of Grace. Translated by George Dupont, S.J. London: Geoffrey Chapman, 1971.
- Freedman, D. G. "An Evolutionary Approach to Research on the Life Cycle." Human Development 14/2 (1971):87-94.
- Freud, Sigmund. <u>General Introduction to Psychoanalysis</u>. New York: Liveright, 1920.
- Furness, J. M. <u>Vital Words of the Bible</u>. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1966.
- Gage, N. L., and Berliner, David C. <u>Educational Psychology</u>.
  2nd ed. Boston: Houghton Mifflin Co., 1979.
- Gangel, Kenneth O. You and Your Spiritual Gifts. Chicago: Moody Press, 1975.
- Garrett, Henry E., and Woodworth, R. S. <u>Statistics in Psychology</u> and <u>Education</u>. 6th ed. New York: David McKay Company, 1966.
- Gee, Donald. <u>Concerning Spiritual Gifts</u>. Springfield, MO: Gospel Publishing House, 1972.
- Gerber, Vergi!. A Manual for Evangelism/Church Growth. Pasadena, CA: William Carey Library, 1973.
- Getz, Gene A. <u>Building Up One Another</u>. Wheaton, IL: Victor Books, 1976.
- . The Measure of a Church. Glendale, CA: Regal Books Division, 1975.
- . Sharpening the Focus of the Church. Chicago: Moody Press, 1974.
- Githiga, J. Gathungu. "The Role of Psychology in Pastoral Care and Counseling." The Journal of Pastoral Counseling 16/2 (Fall-Winter 1981):25-29.
- Glennon, James R. "The Humm-Wadsworth Temperament Scale." <u>Sixth</u>
  <u>Mental Measurements Yearbook</u>. Edited by Oscar K. Buros.
  <u>Highland Park</u>, NJ: Gryphon Press, 1965.
- Godet, Frederic. Commentary on St. Paul's First Epistle to the Corinthians. Translated by A. Cusin. Edinburg: T. & T. Clark, 1889.

- Goold, William H., ed. <u>The Works of John Owen</u>. 16 vols. London: The Banner of Truth Trust, 1965-1968. Vol. 3, 1966.
- , ed. The Works of John Owen. 16 vols. London: The Banner of Truth Trust, 1965-1968. Vol. 4, 1967.
- Gordon, Betty N. "Child Temperament and Adult Behavior: An Explanation of 'Goodness of Fit'." Child Psychiatry and Human Development 11/3 (Spring 1981):167-78.
- Gordon, Edmund W. "Human Diversity, Program Evaluation and Pupil Assessment." <u>Annual Progress in Child Psychiatry and Child Development</u>, 1978, pp. 598-612.
- Gough, Harrison G. <u>California Psychological Inventory</u>. Palo Alto, CA: Consulting Psychologists Press, 1968.
- Griffiths, Michael. <u>Grace--Gifts</u>. Grand Rapids, MI: Wm. G. Eerdmans Publishing Co., 1979.
- Guilford, Joy P., and Zimmerman, W. S. "Fourteen Dimensional Temperament Factors." <u>Psychological Monographs</u> 70 (1956): 1-26.
- Guilford-Zimmerman Temperament Survey. Orange, CA: Sheridan Psychological Services, 1949.
- Hallesby, Ole Christian. <u>Temperament and the Christian Faith</u>. Minneapolis: Augsburg Publishing House, 1962.
- Harper, Michael. As at the Beginning. Plainfield, NJ: Logos International, 1971.
- Harran, Marilyn J. <u>Luther on Conversion</u>. The Early Years. Ithaca, NY: Cornell University Press, 1983.
- Hartshorne, Hugh. <u>Character in Human Relations</u>. New York: Charles Scribner's Sons, 1932.
- Hathaway, Starke R., and McKinley, J. Charnley. <u>Minnesota Multiphasic</u>
  <u>Inventory</u>. New York: The Psychological Corporation, 1967.
- Heilbrun, Alfred B., Jr. "Thorndike Dimensions of Temperament."

  <u>Seventh Mental Measurements Yearbook</u>. Vol. 1. Edited by
  Oscar K. Buros. Highland Park, NJ: Gryphon Press, 1972.
- Hesselgrave, David J. Planting Churches Cross-Culturally. A
  Guide for Home and Foreign Missions. Grand Rapids, MI:

  Baker Book House, 1980.
- Heymans, G., and Wiersma, F. "Beiträge zur Speziellen Psychologie auf Grund einer Massenuntersuchung." Zeitschrift fur Psychologie 42-46, 49, 51 (1906-1909).

- Hilary of Poitiers. On the Trinity II, xxxiv, NPF, 2nd 430, Series ix, 61.
- Hinkle, J. Herbert. <u>Soul Winning in Black Churches</u>. Grand Rapids, MI: Baker Book House, 1973.
- Hoover, D. W., and Leenerts, R. W. <u>Enlightened with His Gifts: A Bible Study on Spiritual Gifts</u>. St. Louis: Lutheran Growth, 1979.
- Howarth, Edgar. "Birth Order and Personality: Some Empirical Findings and a Biobehavioral Theory." Personality and Individual Differences 3/2 (1982):205-10.
- Hoyle, R. Birch. The Holy Spirit in St. Paul. Garden City, NY: Doubleday, Doran & Co., 1929.
- Humm, D. C. G., and Humm, K. A. <u>Humm-Wadsworth Temperament Scale</u>. Los Angeles, CA: Humm Personnel Consultants, 1934-1950.
- Hummel, Charles E. <u>Fire in the Fireplace: Contemporary Charismatic</u> Renewal. Downers Grove, IL: InterVarsity Press, 1978.
- Hunter, Archibald M. <u>Probing the New Testament</u>. Richmond, VA: John Knox Press, 1971.
- Irwin, James R. "Galen on the Temperaments." <u>Journal of General</u>
  Psychology 36 (1947):45-64.
- Isaac, Stephen, and Michael, William B. <u>Handbook in Research and Evaluation</u>. San Diego: EDITS Publishers, 1971.
- Joint Theological Commission of the Church of South India. The Holy Spirit and the Life in Christ. Madras, India: The Christian Literature Society, 1953.
- Jones, W. H. S. <u>Hippocrates</u>. Vol. 4 of 5. Cambridge, MA: Harvard University Press, 1959.
- Jordan, Furneaux. Character as Seen in Body and Parentage. London: n.p., 1896.
- Jordan, Gertrude Elizabeth. "The Relationship between Need and Temperament Type." Ed.D. Dissertation, Andrews University, July 1983.
- Jung, Carl Gustav. <u>Analytic Psychology</u>. <u>Its Theory and Practice</u>. New York: Pantheon Books, 1968.
- . Modern Man and Search of a Soul. New York: Harcourt, Brace and Co., 1933.
- . Mysterium Coniunctionis. Princeton, NJ: Princeton University Priss, 1970.

- . Psychiatric Studies. New York: Pantheon Books, 1957.

  . Psychological Types or the Psychology of Individuation. London: Pantheon Books, 1923.
- . The Spirit in Man, Art, and Literature. New York: Pantheon Books, 1966.
- NJ: The Structure and Dynamics of the Psyche. Princeton, Princeton University Press, 1969.
- . Symbols of Transformation. Analysis of the Prelude to a Case of Schizophrenia. New York: Pantheon Books, 1956a.
- . Two Essays on Analytical Psychology. New York:
  Meridian Books, 1956b.
- Kant, Immanuel. Anthropologie in Pragmatischer Hinsicht, 1798, in Werke, Vol. 4. Berlin: Bruno Casstrer, 1912-1918.
- Kendall, Maurice G. <u>Multivariate Analysis</u>. New York: Hafner Press, Macmillan Publishing Co., 1975.
- Keogh, Barbara K.; Pullis, Michael E.; and Cadwell, Joel. "A Short Form of the Teacher Temperament Questionnaire." <u>Journal of Educational Measurement 19/4 (Winter 1982):323-29.</u>
- Kerlinger, Fred N., and Pedhazur, E. J. <u>Multiple Regression in Behavioral Research</u>. New York: Holt, Rinehart and Winston, 1973.
- Kinghorn, Kenneth Cain. <u>Gifts of the Spirit</u>. Nashville: Abingdon Press, 1976.
- Klonowicz, Tatiana. "A Person-Environment Fit at Work: An Attempt to Evaluate the Costs of Adaptation." <u>Polish Psychological Bulletin</u> 1/4 (1980):249-55.
- Konecny, Robert. "Personal Tempo in the Structure and Dynamics of Personality." <u>Psychologia a Patopsychologiadietata</u> 15/2 (1980):99-117.
- Kretschmer, Ernst. Physique and Character. An Investigation of the Nature of Constitution and of the Theory of Temperament. London: Routledge and Kegan Paul, 1925.
- Kuzmina, I. "Soviet-American Cooperation in Longevity Studies." Current Anthropology 23/4 (August 1984):452.
- Kuyper, Abraham. The Work of the Holy Spirit. Translated by Henri de Vries. New York: Funk and Wagnalls Co., 1900.
- LaHaye, Tim. <u>Spirit-Controlled Temperament</u>. Living Studies. Wheaton, IL: Tyndale House Publishers, 1966a.

- \_\_\_\_\_\_. LaHaye Temperament Analysis. El Cajon, CA: Family Life Seminars, 1979.
- . <u>Understanding the Male Temperament</u>. Plainfield, NJ: Fleming H. Revell Co., 1977.
- . Your Temperament Can Be Changed. Wheaton, IL:
  Tyndale House Publishers, 1966b.
- . <u>Transformed Temperaments</u>. Wheaton, IL: Tyndale House Publishers, 1971.
- Laurentin, René. "Terminological Precision." In <u>Charisms in the Church</u>, pp. 3-112. Edited by Christian Duquoc and Casiano Floristan. New York: Seabury Press, 1978.
- Lentz, Theodore F., Jr. An Experimental Method for the Discovery and Development of Tests of Character. New York: Teachers College, Columbia University, 1925.
- Lerner, Richard M., and Hultsch, David F. Human Development. A Life-Span Perspective. New York: McGraw-Hill, 1983.
- Le Senne, René. <u>Traite de caracterologie</u>. Paris: Presses Universitaires de France, 1957.
- Lester, David. <u>A Physiological Basis for Personality Traits</u>. Springfield, IL: Charles C. Thomas, 1974.
- Ligon, Ernest M. <u>Dimensions of Character</u>. New York: Macmillan Co., 1956.
- Linton, Patrick, H.; Levine, Lindsey; Kuechenmeister, Craig A.; and White, Hilton B. "Lifestyle Change in Adulthcod."

  Research Communications in Psychology, Psychiatry, and Behavior 3/1 (1978):1-13.
- Loehlin, John C. "John Locke and Behavior Genetics." <u>Behavior</u> <u>Genetics</u> 13/1 (January 1983):117-21.
- Lonsway, Francis A. "The Laity and the Perseverance of Priests and Ministers." Counseling and Values 21/1 (October 1976):44-50.
- MacGorman, Jack W. <u>The Gifts of the Spirit</u>. Nashville: Broadman Press, 1974.
- Mahoney, M. Frances. "An Investigation into Temperament and Teacher Potentiality in Selected Groups of College Women Students." <u>Dissertation Abstracts</u> 28/10-G (1968): 4284.
- Mallone, George. <u>Those Controversial Gifts</u>. Downers Grove, IL: InterVarsity Press, 1983.

- Manners, George E., and Steger, Joseph A. "The Stability of the Edwards Personal Preference Schedule and the Guilford-Zimmerman Temperament Survey." Personnel Psychology 28 (1975):501-509.
- Matheny, Adam P., and Dolan, Anne B. "A Twin Study of Personality and Temperament During Middle Childhood." <u>Journal of Research in Personality</u> 14/2 (June 1980):224-34.
- McDevitt, Sean C. "A Longitudinal Assessment of Continuity and Stability in Temperamental Characteristics from Infancy to Early Childhood." <u>Dissertation Abstracts International</u> 37/12-A (June 1977):7642.
- McRae, William. <u>The Dynamics of Spiritual Gifts</u>. Grand Rapids: Zondervan Publishing House, 1976.
- Mead, Margaret. "Twenty-fourth Annual Karen-Horney Lecture: Temperamental Differences and Sexual Dimorphism." American Journal of Psychoanalysis 37/3 (1977):179-92.
- Meredith, Gerald M. "Sex Temperament a mong Japanese-American College Students in Hawaii." <u>Journal of Social Psychology</u> 77/2 (1969):149-56.
- Metzner, Raiph. Know Your Type. Maps of Identity. New York:
  Anchor Books, 1979.
- Mikhailov, I. V. "The Role of Psychological Education in Stimulating Self-Evaluation." <u>Voprosy Pseikhologii</u> 3 (May-June 1975): 131-33.
- Miller, Randolph Crump. The Clue to Christian Education. New York: Charles Scribner's Sons, 1950.
- Murphy, Edward F. <u>Spiritual Gifts and the Great Commission</u>. Pasadena, CA: Mandate Press, 1975.
- Naden, Roy C. <u>Discovering Your Spiritual Gifts</u>. Berrien Springs, MI: Andrews University, 1982.
- Naden, Roy C., and Cruise, Robert J. <u>The Spiritual Gifts Inventory</u>. Berrien Springs, MI: Institute of Church Ministry, 1981.
- Naden, Roy C.; Cruise, Robert J.; and Cash, William R. <u>The Spiritual Gifts Manual</u>. Berrien Springs, MI: Andrews University Institute of Church Ministry, 1982.
- Neighbour, Ralph Webster, Jr. This Gift Is Mine. Nashville, TN: Broadman Press, 1974.
- Neve, Lloyd. The Spirit of God in the Old Testament. Tokyo: Seibunsha, 1972.

- Nida, Eugene A. <u>Understanding Latin Americans with a Special</u>
  Reference to Religious Values and Movements. Pasadena
  CA: William Carey Library, 1974.
- Nunnally, Jum C. <u>Psychometric Theory</u>. New York: McGraw-Hill Book Company, 1967.
- Orjala, Paul R. Get Ready to Grow. Kansas City: Beacon Hill Press of Kansas City, 1978.
- Cstle, Bernard. <u>Statistics in Research</u>. 2nd ed. Ames, IA: Iowa State University Press, 1963.
- Owen, John. <u>The Holy Spirit, His Gifts and Power</u>. Grand Rapids: Kregel Publications, 1954.
- Palermo, Marion E. "Child Temperament and Contextual Demands: A Text of the Goodness of Fit Model." <u>Journal of Child Care</u> 1 (April 1982):21-33.
- Peck, Robert F., and Havighurst, Robert J. The Psychology of Character Development. New York: John Wiley & Sons, 1960.
- Persson-Blennow, Inger, and McNeil, Thomas F. "Questionnaires for Measurement of Temperament in One- and Two-Year Old Children: Development and Standardization." Journal of Child Psychology and Psychiatry and Allied Disciplines 21/1 (January 1980):37-46.
- Persson-Blennow, Inger, and McNeil, Thomas F. "Temperament Characteristics of Children in Relation to Gender, Birth Order, and Social Class." <u>American Journal of Orthopsychiatry</u> 51/4 (October 1981):710-14.
- Piepkorn, Arthur. "Charisma in the New Testament and the Apostolic Fathers." Concordia Theological Monthly 42 (May 1971):.
- Platt, S. H. The Gift of Power; or, the Special Influences of the Holy Spirit. The Need of the Church. Northville, CT: Carlton and Porter, 1956.
- Plomin, Robert J. "A Temperament Theory of Personality Development: Parent-Child Interactions." <u>Dissertation Abstracts</u> International 35/8-B (February 1975):4150.
- Plomin, Robert, and Rowe, David C. "A Twin Study of Temperament in Young Children." <u>Annual Progress in Child Psychiatry and Child Development</u>, 1978, pp. 216-22.
- Predigor, D. "A World-of-Work Map for Career Exploration." Vocational Guidance Quarterly, 1976.

- Prelinger, Ernst, and Zimet, Carl N. An Ego-Psychological Approach to Character Assessment. London: Free Press of Glencoe, 1964.
- Price, J. M.; Carpenter, L. L.; and Chapman, J. H. <u>Introduction</u> to Religious Education. New York: Macmillan Co., 1932.
- Purkiser, W. T. The Gifts of the Spirit. Kansas City: Beacon Hill Press of Kansas City, 1975.
- Rees, T. The Holy Spirit in Thought and Experience. New York: Charles Scribner's Sons, 1915.
- Richards, Lawrence O. <u>A Theology of Christian Education</u>. Grand Rapids: Zondervan Publishing House, 1975.
- Richards, W. T. H. <u>Pentecost Is Dynamite</u>. New York: Abingdon Press, 1972.
- Richmond, Samuel B. <u>Statistical Analysis</u>. 2nd ed. New York: Ronald Press Co., 1964.
- Roback, Abraham Aaron, ed. <u>Present-day Psychology</u>. New York: Philosophical Library, 1955.
- . The Psychology of Character. London: Routledge & Kegan Paul, 1927; 3rd ed. 1952.
- . The Psychology of Character. New York: Arno Press,
- Robertson, J. D. <u>The Holy Spirit and Christian Service</u>. New York: American Tract Society, 1901.
- Rogillio, Byron Lee. "How the Spiritual Gifts of the Laos Can Be Called Forth, Developed, and Utilized in the Local Church." Ed.D. dissertation. Southern Baptist Theological Seminary, 1971.
- Rosato, Philip J., S.J. <u>The Spirit as Lord</u>. <u>The Pneumatology of Karl Barth</u>. <u>Edinburgh</u>: T. & T. Clark, 1981.
- Rosen, Benson, and Jerdee, Thomas. "Perceived Sex Differences in Managerially Relevant Characteristics." Sex Roles 4/6 (December 1978):837-43.
- Rosenblatt, Paul C., and Cunningham, Michael R. "Sex Differences in Cross-Cultural Perspective." In B. B. Lloyd & J. Archer, eds. Exploring Sex Differences. New York: Academic Press, 1976.
- Rowe, David C. "A Twin Study of Temperament in Young Children."

  Journal of Psychology 97 (September 1977):107-113.

- Runyon, Richard P., and Haber, Audrey. <u>Fundamentals of Behavioral Statistics</u>. 3rd ed. Reading, MA: Addison-Wesley Publishing Co., 1976.
- Ryrie, Charles Caldwell. <u>Biblical Theology of the New Testament</u>. Chicago: Moody Press, 1959.
- . The Holy Spirit. Chicago: Moody Press, 1965.
- Sameroff, A., and Kelly, P. "Socio-economic Status, Racial and Mental Health Factors in Infant Temperament." Unpublished manuscript.
- Sanchez, Ocana, and Arteaga, Roberto. "The Study of Differential Psychology." Revista del Instituto de la Juventud 61 (October 1975):7-32.
- Sanders, John O. The Holy Spirit and His Gifts. Grand Rapids, MI: Zondervan Publishing House, 1970.
- Schramm, Mary R. <u>Gifts of Grace</u>. Minneapolis: Augsburg Publishing House, 1982.
- Sheldon, W. H. The Varieties of Temperament. A Psychology of Constitutional Differences. New York: Harper & Brothers Publishers, 1942.
- Simonds, John T., and Simonds, Marie P. "Factor Analysis of Temperament Category Scores in a Sample of Nursery School Children." <u>Journal of Clinical Psychology</u> 38/2 (April 1982):359-66.
- Simpson, A. B. The Holy Spirit or Power from on High. 2 vols. New York: Christian Alliance Publishing Co., 1895.
- Smeaton, George. The Doctrine of the Holy Spirit. 2nd ed. Edinburg: T. & T. Clark, 1889.
- Smith, Wilfred C. Religious Diversity. New York: Crossroad Publishing Company, 1976.
- Sneck, William Joseph. Charismatic Spiritual Gifts. A Phenomenological Analysis. Washington: University Press of America, Incl, 1981.
- Spearman, Charles E. <u>The Abilities of Man</u>. London: Macmillan Company, 1927.
- Stedman, Ray C. <u>Body Life</u>. Glendale, CA: Regal Books Division, G/L Publications, 1972.
- Stokes, Mack B. The Holy Spirit and Christian Experience.
  Nashville, TN: Graded Press, 1975.

- Straman, Minerva C. "Expressed Parental Attitudes toward Child Rearing in Relation to Study Habits, Study Attitudes, and Study Skills Achievement in Early Adolescence." Ed.D. dissertation. Andrews University, November 1978.
- Strauss, Lehman. Be Filled with the Spirit. Grand Rapids, MI: Zondervan Publishing House, 1976.
- Strelau, Jan. "Biologically Determined Dimensions of Personality or Temperament?" Personality and Individual Differences 3/4 (1982):355-60.
- Stuenkel, Omar. How to Receive and Use the Holy Spirit's Gifts:

  We Are One in the Spirit. Minneapolis: Augsburg Publishing
  House, 1979.
- Sweet, Leonard I. New Life in the Spirit. Philadelphia: Westminster Press, 1982.
- <u>Taylor-Johnson Temperament Analysis</u>. Los Angeles: Psychological Publications, 1977.
- Taylor-Johnson Temperament Analysis Manual. Los Angeles:
  Psychological Publications, 1980.
- Tertullian A Treatise of the Soul, ix. The Ante-Nicene Fathers. 3:188.
- Thomas, Alexander. "Temperamental Individuality from Childhood to Adolescence." Annual Progress in Child Psychiatry and Child Development, 1978, pp. 223-44.
- Thomas, Alexander, and Chess, Stella. "Genesis and Evolution of Behavioral Disorders: From Infancy to Early Adult Life." American Journal of Psychiatry 141/1 (January 1984):1-9.
- Thomas, A., and Chess, S. <u>Temperament and Development</u>. New York: Brunner/Mazel, 1977.
- Thomas, Latta R. <u>Biblical Faith and the Black American</u>. Valley Forge, PA: <u>Judson Press</u>, 1976.
- Thomas, Robert L. <u>Understanding Spiritual Gifts: An Exegetical Study of 1 Corinthians 12-14</u>. Chicago: Moody Bible Institute, 1978.
- Thorndike, Robert L. <u>Thorndike Dimensions of Temperament</u>. New York: Psychological Corporation, 1963-1966.
- Thorndike, Robert M. <u>Correlational Procedure for Research</u>. New York: Garner Press, 1978.
- Tidwell, Charles A. <u>Educational Ministry of a Church</u>. Nashville, TN: Broadman Press, 1982.

- Timpe, Randie L. "Epistemological and Metaphysical Limits to Integration of Psychology and Theology." <u>Journal of Psychology and Christianity 2 (Fall 1983):3.</u>
- Trenton Spiritual Gifts Analysis. Pasadena, CA: Charles E. Fuller Institute of Evangelism and Church Growth, 1981.
- Tune, G. S. "The Influence of Age and Temperament on the Adult Human Sleep-Wakefulness Pattern." <u>British Journal of Psychology</u> 60/4 (1969):431-41.
- Tuttle, Robert G., Jr. <u>The Partakers</u>. <u>Holy Spirit Powers for Persevering Christians</u>. Nashville: Abingdon Press, 1974.
- Tzuriel, David, and Klein, Prina S. "Learning Skills and Types of Temperaments as Discriminants between Intrinsically and Extrinsically Motivated Children." <u>Psychological Reports</u> 53/1 (August 1983):59-69.
- Unger, Merril F. The Baptism and Gifts of the Holy Spirit.
  Chicago: Moody Press, 1974.
- Vaughan, C. R. <u>The Gifts of the Holy Spirit</u>. Richmond: Presbyterian Committee of Publication, 1894.
- Wagner, C. Peter. Your Church Can Be Healthy. Nashville: Abingdon, 1979.
- . Your Church Can Grow. Glendale, CA: G/L Regal Books, 1976.
- . Your Spiritual Gifts Can Help Your Church Grow. Glendale, CA: G/L Regal Books, 1979.
- Wallenkampf, Arnold Valentin. New by the Spirit. Mountain View, CA: Pacific Press Publishing Association, 1978.
- Walvoord, John F. <u>The Holy Spirit</u>. 3rd ed. Grand Rapids: Zondervan Publishing House, 1975.
- Warfield, Benjamin B. <u>Miracles Yesterday and Today Real and</u> Counterfeit. Grand Rapids: Wm. B. Eerdmans, 1965.
- Warren, Max, A.C. <u>The Christian Imperative</u>. New York: Charles Scribner's Sons, 1955.
- Webster's Dictionary of the English Language. Unabridged Encyclopedic Edition. S. v. 'Temperament."
- Wert, James E.; Neidt, Charles O.; and Ahmann, Stanley, J.

  Statistical Methods in Education and Psychological Research.

  New York: Appleton-Century-Crofts, 1954.

- White, Ellen G. Mind, Character, and Personality. 2 vols.
  Nashville, TN: Southern Publishing Association, 1977.
- Wilhoit, P. "Assessment of Temperament During the First Months of Life." Doctoral dissertation, Florida State University, Tallahassee, FL, 1976.
- Wright, H. Norman. <u>Biblical Application for the Taylor-Johnson Temperament Analysis</u>. Santa Ana, CA: Christian Marriage Enrichment, 1975.
- Yohn, Rick. <u>Discover Your Spiritual Gift and Use It</u>. Wheaton, IL: Tyndale House Publishers, 1974.
- Youngberg, John B., and Hessel, Wolfgang H. "New Insights into Temperament." Unpublished article. Andrews University, [1982].

## VITA

Name: Roland Lérius Joachim

Place of birth: Ouanaminthe, Haiti

Date of birth: October 15, 1933

Marital status: Married to Marie-Solange born Morel

Schools attended: Séminaire Adventiste du Salève

Collonges Sous-Saiève, France

University of Abidjan

Ivory Coast

Andrews University

Berrien Springs, Michigan

Degrees awarded: 1967 - License in Theology - Séminaire Adventiste

du Salève

1972 - Diplôme Universitaire d'Etudes Littéraires,

University of Abidjan

1973 - Master of Arts in Religion

Andrews University

Experience: Chief bookkeeper, U.S. Army General Hospital, France

Modern Mathematics teacher, Ivory Coast

Bible, Greek, History, and Pastoral Formation Teacher.

Ivory Coast

Principal, Adventist Secondary School, Ivory Coast Mission President and SAWS Representative, Upper Volta

Present Appointment: Education, Youth, Health, and Temperance Director

Sahel Union