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INPERACTIONS OF DOGMATISM AND SELECTED VARIABLES UPON JOB SATISFACTION OF UNIVERSITY PROFESSORS IN THAILAND.

THE UNIVERSITY OF OKLAHOMA, PH.D. 1978

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## THE UNIVERSITY OF OKLAHOMA

gRADUATE COLLECE

INTERACTIONS OF DOGMATISM AND SELECTED VARIABLES UPON JOB SATISFACTION OF UNIVERSITY PROFESSORS IN THAILAND

A DISSERTATION<br>SUBMITTED TO THE GRADUATE FACULTY<br>in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY

BY
PRACOB COOPARAT
Norman, Oklahoma
1978

INTERACTIONS OF DOGMATISM AND SELECTED VARIABLES UPON JOB SATISFACTION OF UNIVERSITY PROFESSORS IN THAILAND

APPROVED BY


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## CHAPTER I

## INTRODUCTION

## Background of the Problem

Interest in the study of college faculty and students surged upward in the $1960^{\prime}$ 's with the renewal of a campus political activism. Protests and demonstrations seemingly enveloped American higher education in the late sixties as a reaction to the United States' involvement in the Vietnam War (Ladd \& Lipset, 1975). The wave of student unrest which started on the Berkeley campus of the University of California in 1964 spread rapidly to country after country- to Berlin, Amsterdam, the London School of Economics and Essex, to Rome and Turin, to Madrid, to Prague, and to Paris (Embling, 1974). Before the Vietnam era, systematic inquiry into academic life had been mostly neglected by social scientists. Now after a decade of turmoll on campuses world wide, much is being writren. However, from a critical survey of literature, noticeably few of the researchers have dealt with the characteristics and behaviors of professors. Understanding politics and student unrest in universities requires taking into account the academic staff (Saha, 1976). Richardson and Blocker (1966) also believed there is still a need to take a closer look at college faculty and learn more about their behavior.

Furthermore, most of the research was done in the United States
and other industrial countries like England, West Germany, the Netherlands, and Australia, where the cultural and environmental factors as well as the tradition of higher education have considerably limited the generalizability of sonceptual knowledge to other countries with different backgrounds. For example, in 1969 from the Carnegie Commission Survey of Student and Faculty Opinion, it was found that liberal professors with considerably low authoritarianism were the most satisfied in their academic profession. The researcher doubts that the same questionnaire would yield the same or comparable results if it were administered to professors in a society where the social setting was not as comparatively low in authoritarianism as the colleges and universities of the United States.

## Statement of the Problem

The problem of this research was: What are the interactions of dogmatism and selected variables (such as major fields, self-perceived social responsibilities, and perceived political effects) upon job satisfaction of university professors in Thailand?

More specifically, the researcher investigated the following:

1. Are there different levels of dogmatism of university professors in Thailand grouped according to personal characteristics, levels of perceived social responsibilities, and attitudes toward higher education issues?
2. Are there different levels of job satisfaction of university professors in Thailand grouped according to personal characteristics, levels of perceived social responsibilities, and attitudes toward higher education issues?
3. Are there interactions of dogmatism and selected variables (such as major field, self-perceived social responsibilities, and perceived political effects) upon job satisfaction of university professors in Thailand?

## Definition of Terms

Dogmatism. The term refers to the characteristics of a person's belief-disbelief system as closed; namely, the extent to which the person cannot receiva, evaluate, and act on relevant information received from the outside on its own intrinsic merits, being encumbered by irrelevant factors in the situation arising from within the person or from the outside. Synonyms: closed-mindedness, general authoritarianism, general intolerance.

Job satisfaction. The term refers to the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values. Job dissatisfaction is the nonpleasurable emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values or as entailing disvalues. Job satisfaction and dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing (Locke, 1969, p. 316). Universities. In Thailand, they are universities and equivalent institutions under the supervision of the Office of University Affairs. They are all degree granting and comprehensive institutions offering programs, graduate as well as undergraduate, in various disciplines (Office of the National Education Commission, 1977, p. 11). Synonym: government universities.

University professors. The term refers to professional employees who held academic appointments at the universities. This includes professors, associate professors, assistant professors, and instructors. The term excludes teaching assistants and teachers from university demonstration schools. Synonyms: faculty members, university teacher, academics.

## Significance of the Study

While researchers have provided some literature about higher education in the industrial and affluent societies, they have ignored the agrarian and less affluent societies with different cultural backgrounds. It has been apparent that universities are having an increasingly important role in the third world countries in their social, economic, and political development. However, there is such limited conceptual knowledge about academic personnel that it is difficult to establish realistic administrative planning. Assuming that all academics, regardless of their environmental background, have similar characteristics and behaviors is not only incorrect but may lead to the same kind of failure that colonialists introduced to their colonies (Carnoy, 1974). This study of Thai university professors' dogmatism and their social and organizational behaviors is another step in linking the mainstream of knowledge in higher education from affluent societies to others.

In addition, the researcher hopes that the study will suggest how the external constraints such as political atmosphere affect the academic environment in Thailand. It is expected that the study will furnish some valuable data for the parties concerned which may result in
identifying more clearly the role of the university professor in a changing society.

## Limitations of the Study

1. The study was limited due to the cultural and situational factors. It was conducted while the political situation in Thailand was uncertain. One of the researcher's intentions was to evaluate how extensive the effect of political and social events was upon university professors.
2. The respondents in this study were university professors from selected universities and equivalent institutions within the vicinity of Bangkok-Thonburi Metropolitan City. Though the respondents were randomly selected, it was probable that some faculty members were absent when the questionnaire was administered. Absentees might include a number of faculty who left the institutions for political reasons.
3. Conclusions drawn in this study were within the limits of the items comprising the questionnaire. Especially the Dogmatism Scale utilized in the study evaluated general authoritarianism rather than political attitudes of the left or right.
4. The study had an exploratory design. The researcher intended to use the results of the study as a point of departure for further development of the instruments on organizational behavior for use in future research.

## CHAPTER II

## THEORETICAL FRAMEWORK AND RESEARCH

The theoretical framework for this study is primarily based on the social system model developed by Getzels and Guba (1957). The model serves as a basis for describing university professors, their personalities, roles, and organizational behaviors.

By the term "social system" Parsons (1951, pp. 204-205) meant:
... a'process of complementary interaction of two or more individual actors in which each conforms with the expectations of the other(s) in such a way that alter's reactions to ego's actions are positive sanctions which serve to reinforce his given need-dispositions and thus to fulfill his given expectations.

This definition can be clearly illustrated by utilizing the social system model (Figure 1). Getzels añ Guba (1957) explained that observed or social behavior within a social system is always a function of the interaction between two dimensions, (1) the normative dimensions of behavior and (2) the personal dimension of behavior. The normative dimension consists of institution, role, and role expectation, each being the analytic unit for the term preceding. The personal dimension consists of̄ individual, personality, and need disposition, each term again serving as the analytic unit for the term preceding it. A given act is conceived as deriving simultaneously from the normative and personal dimensions, and social or organizational

Normative (Nomothetic) Dimension


Figure 1 The normative and personal dimensions of social behavior (From J. W. Getzels \& E. G. Guba, Social behavior and the administrative process. School Review, 1957, 65, pp. 423441).
behavior in a social system as a function of the interaction between role and personality. Getzels (1957) provided the following equation which were used in this study.
$B=f(\mathrm{RXP})$, where
$B=$ observed behavior,
$\mathrm{R}=$ institutional role: and
$P=$ personality of the role incumbent
The "observed behavior" was mainly determined by university professors' job satisfaction. The "institutional role" was described as hw various groups and individuals expect individuals in the role of university professors to behave. Finally, personalities of the role incumbents were evaluated and illustrated by university professors' demographic data, levels of dogmatism, social responsibility, and opinions upon higher education.

The literature was organized according to the social system model. It was divided into four major parts. The first part concerns tho normative dimension of university as a social system. It explains
characteristics and goals of university in a modern world and how they impose expectations upon the role of university professors. The second is about the personal dimension of the university. It describes individuals assuming the role of university professors, provides a rationale and related research supporiing dogmatism as a major determinant of university professor's personalities, and evaluates other demographic variables that may be significant in the study. The third explains how the interaction of the institutional and personal dimensions create organizational behavior, and how role-personality conflict or congruence may result. The fourth examines the cultural and situational dimensions of the study, the role of university professors as determined by culture as well as situations and how role conflicts may result. The last evaluates various variables. that may concern the study.

## The Normative Dimension

The University as an Institution
Institution, according to Etzioni (1964, p. 2) is one of many
synonyms for the term, organization. He regarded institution as a term that has various meanings:

Institution is sometimes used to refer to certain types of organization, either quite respectable ones as in "GM is an institution," or quite unrespectable ones, as in "He is in an institution." Sometimes institution refers to a quite different phenomenon- namely; to a normative principle that culturally defines behavior such as marriage or property.

Hertzler (1929, p. 7) also found the term referring to 25 different meanings. However, Getzels, Lipham, and Campbell (1968, pp. 5659) insisted on using the word to discriminate the meaning as the normative side of organization. In their framework, institutions have at least five
basic properties. They are, (1) purposive, (2) peopled, (3) structural, (4) normative, and (5) sanction-bearing. University as an institution possesses all of these properties which can be illustrated as follows: The purposes of the university. Universities, like other social systems, are established to carry out certain goals. However, due to diversified characteristics of universities in the modern world, they cannot be described as clearly as other types of organizations. Cohen and March (1974, p. 3) stated that the American college or university "... does not know what it is doing. Its goals are either vague or in dispute." Dodd (1962, pp. 6-8) explained the reason for its lack of objectives, "A true university like most marriages is a unity of diversities." No matter how diverse the goals of university are, some certain purposes can be agreed upon.

Baldridge (1971, pp. 118-123) focused on a large urban university in the development of his political model of university governance. By analyzing the results of the faculty senate survey on that university's goals, he found the most important 9 goals to be as follows: (1) teaching graduate students, (2) teaching undergraduates, (3) research, (4) maintenance of university conditions attractive to excellent scholars, (5) enhancement of the reputation of the university, (6) maintenance of a scholarly atmosphere, (7) preservation of the cultural heritage, (8) application of knowledge to like situaticns, and (9) solution of problems of great national and international concern. These goals are generalized and it can be fairly said that many universities do share some or all of these.

Ladd and Lipset (1975) believed that generally a university has three functions:


#### Abstract

... socialization, in the sense of the transmission of traditional values, whether secular or religious; innovation and scholarship, the support for creative intellectuals in the sciences, humanities, and social sciences who are concerned with advancing the frontlers of knowledge and artistic work; and community service, the application of the knowledge and skills concentrated in the university to achieve objectives set by lay powers, including both government and private institutions (pp. 10-11).


In Thailand, though goals of the university are not clearly written and difficult to pursue, they do not deviate much from the universalistic tendencies of teaching, research and community services. With only one exception, the university is regarded as a conservative agent. A fourth goal, preserving cultural and art heritage for the society, is added.

The university and its people. "If institutions are to carry out their function, human agents are required" (Getzels et al., 1968, p. 57). A university, like most complex organizations, requires various types of personnel in order to perform its functions. These personnel are such as administrators, academic personnel, specialists, and others who perform maintenance, clerical, food-service, and transportation tasks. However, this study was concentrated only on academic personnel such as professors, associate professors, assistant professors, and instructors.

The structure of the university. Scott and Mitchell (1972, p. 40) defined structure as a term which is applied to the relationships that exist among the various activities performed in a organization. The purpose of structure is to provide an orderly arrangement among functions so the objectives of the organization can be accomplished effectively. Structure implies system and pattern. Etzioni (1964, p. 3) referred to structure as divisions of labor, power, and communication responsibilities.

Ile stated, "... divisions which are not randomly or traditionally patterned, but deliberately planned to enhance the realization of specific goals;...." If the goals of the institution are known, the tasks to achieve them may be specified and organized into relevant roles. Each role is assigned certain responsibilities and concomitant resources including authority for implementing the tasks. In the case of university's organization, because of the diversified and rather anarchic characteristics of modern universities, it is a problem to describe and understand them (Cohen \& March, 1974). Corson (1975) commented that it would be misleading to conclude that a university is organized like a corporation or a governmental agency, or even a hospital. Goheen (1969), former president of Princeton University, had a similar opinion, "A university is a loose and peculiar association of persons, assembled for the pursuit of knowledge and understanding ..." (pp. 4-5).

From the beginning of the western world universities have persistenciy resisied piessures (Goheen, 1969). Unlike the business enterprise, the government bureau, and the military forces which are held together as organizations by an authoritarian system of rules and processes, Clark (1967) believed that a university has been held together rather by shared beliefs, attitudes, and values. Definitely, its loose structure and unique characteristics have an effect upon the role of its academic personnel which will be discussed later.

The university as a normative institution. The fact that tasks for achieving the institutional goals are organized into prescribed roles implies that the roles serve as norms for the behavior of the role incumbents. A norm, according to Bertrand's (1972, p. 34) definition,
means required or acceptable behavior for a given interactional situation. Norms provide standards for behaving as well as standard for judging behavior. University professors, under no exception, must behave in more or less expected ways if they are to retain their legitimate place in a university.

The university and its sanction-bearing nature. The existence of norms is of no consequence unless there is adherence to them. Getzels, et al. (1968, p. 59) stated, "accordingly, institutions must have at their disposal appropriate positive and negative sanctions for insuring compliance, at least within broad limits." Compliance (Etzioni, 1961, p. 3) refers both to "... a relation in which an actor behaves in accordance with a directive supported by another actor's power, and to the orientation of the subordinated actor to the power applied." In a strict sense, every member of a social system has some authority. Baldridge (1971, pp. 151-163) inquired about the resources available to a partisan group of a university- the weapons it can muster to create compliance. He believed four power bases are critical in university politics: bureaucratic, professional, coercive, and personal. Bureaucratic resources may be used by administrators against university professors, such as control of the budget, personnel appointment and removal, the control of legitimate access, and the control of information. University professors, in the reverse direction, can have two fmportant resources of power, such as professional and personal resources. They have their own influence based on the authority of knowledge which others lack, and others allow this influence because they believe that university professors have information they lack. This kind of knowledge, along with personal reputation will
enhance their personal power. There are few cases reported which suggest that academic personnel use coercive power effectively. Students, in the long history of the university of the modern world, seem to be the most frequent utilizers of such power. Furthermore, external partisans may use this coercive power in the university's sanction. For example, the government of a country may order police or national troops to arrest student demonstrators on campus and Marxist-oriented professors wherever they are found.

These kinds of power of all partisans will cause individuals in the role of university professor to comply with the role expectations.

## The Role of University Teachers

Parsons (1951, pp. 38-39) defined a role as,
... a sector of the total orientation system of an individual actor which is organized about expectations in relation to a particular interaction contest, that is integrated with a particular set of value-standard which govern interaction with one or more alters in the appropriate complimentary role.

Bertrand (1972, p. 35) believed that,
Roles are the second structural unit of social system and consist of a more or less integrated subset of norms. In other words, a role is made up of several related norms, all of which are dedicated to the same function. Roles are thus supportive of social institutions, such as religion, education or the family.

In relation to goals of a university, a role of the university professor may be universally and professionally defined according to Ladd and Lipset (1975) as having three subroles. The first may be identified largely. with the professor's role as teacher, the second may be seen in the academic's role as schciar, scientist, or creative artist, and the
third, in the role of consultant or as applied researcher. These functions, among other things, have put some special demands upon the academic personnel. Harrison and Weightman (1974) believed that these demands are not for conformity and acceptance but for rigorous scrutiny and criticism. Blau (1973) believed that the academic standing of institutions of higher education as well as that of individual faculty members depends on their contributions to research and scholarship. Their creative endeavors to provide new insights are so important that they lead the university to accept the paradoxical responsibility to find ways to institutionalize creative scholarship and research. Furthermore, he pointed out that to provide the atmosphere necessary for creativity and scholarship a university cannot rely on conformity to bureaucratic procedure (p. 190). Corson (1975) noted that not only the university but society as well has recognized the function of the university and the non-conforming characteristics of those having the title of professor. So it has accorded to those who perform their duties certain protections that influence the structure and processes of the college and university. Those protections are customarily summed up in the term " academic freedom"the guarantee of freedom of expression and inquiry. This may be in such forms as tenure systems, administrative autonomy, and faculty senates.

## The Personal Dimension

To understand the specific behavior and social interaction of a particular role incumbent it is necessary to understand the nature of individuals as "flesh and blood" inhabiting the roles, and their modes of perceiving and reacting to the expectations. The individual dimension
can be broken down into component elements of personality and needdispositions.

## Personality

Personality is one of those terms which is seldom defined in exactly the same way by any two authorities (Horton \& Hunt, 1976, p. 81). Fromm (1947, pp. 58-59) stated, "The infinite diversity of personlities is in itself characteristic of human existence." Yinger (1965, p. 141) defined personality as, "the totality of behavior of an individual with a given tendency system interacting with a sequence of situation." Bertrand (1972, pp. 5-6) provided a similar definition. From the definitions, it can be seen that human differences such as age, sex, race, and other physical attributes are linked to capacities, drive, and self-conceptions to form personality. These kinds of physical and psychological qualities are characteristic of one individual and make the individual unique. It can also be stated that no two people can have exactly the same personality (Bertrand, 1972, p. 6).

Buhler, Goldstein, Maslow, and other leading psychologists pointed out that personality is not the mere sum of our feelings, volitions, instincts, and conceptions. Laszlo (1969, p. 32) stated:

Whether we admit that there is such a thing as a subconscious or not, we must admit that we do not possess,say, the capacity to love independently of the capacity to reason, to will, or to worry. All such traits of our personality interact and constitute and integrated "personality syndrome" which acts as a whole and has properties as a whole. This is what we call "my personality" or simply "me".

Finally, Getzels, et al. (1968, p. 70) gave a way to conceptualize

Just as role may be defined by the component expectations, so personality may be defined by the component need-dispositions. Of course, besides need-dispositions, there are other components significant in determining personality, such as drives, attitudes, interests, perceptual styles, cognitive ability, and belief system. For the purpose of the study, the most often cited need-dispositions in the . social system model were substituted by belief system, attitudes, and opinions.

Dogmatism as a Major Determinant of University Professors' Personalities

The Dogmatism Scale as a measure of a person's belief system can be significantly contributive to studying personalities of university professors. Rokeach (1954) defined dogmatism as,
(a) a relatively closed cognitive organizacion of beliefs and disbeliefs about reality, (b) organized around a central set of beliefs about absolute authority which, in turn, (c) provides a framework for patterns of intolerance ... toward others (p. 195).

From various research, dogmatism was found to relate to many other components of personality. Dogmatism definitely cannot be a measure of the totality of personality, but it has proved to be one of the major personality determinants. The following is the research on dogmatism and authoritarianism that can provide rational support for the main hypothesis of this study.

Compared with low dogmatics, high dogmatics are more anxious (Rokeach, 1960). Rokeach and Restle (1960) wrote that closed-minded or highly dogmatic individuals tend to believe that "the world one lives in or the situation one is in at a particular moment is a threatening one" (p. 56). They also have difficulty and take longer to reach a solution
in solving complex problems. This was substantiated by Fillenbaum and Jackson (1961) and (Kemp, 1961; 1962). Robins and Rogers (1975) found an inverse relationship between dogmatism and study time among 11-12th graders. They explained that individuals who are closed-minded have trouble accepting new beliefs or attitudes in social, political, religious, and ethnic differences. This aspect of "closed-mindedness" is what people commonly refer to as a "know-it-all" attitude. Higginbotham (1976) found that dogmatism relates to anxiety as well as irrationality. This was congruent with a previous study done by Norman (1966) involving college women.

High dogmatics tend to overidealize and rely heavily on authority (Vidulich \& Kaiman, 1961; Kemp, 1963; McCarthy \& Johnson, 1962; Norris, 1965; Direnzo, 1967; Steffensmeier, 1974). Bord (1976), among the latest supporters, found that designated authorities who failed to behave in an authoritative manner were evaluated less favorably by high dogmatics than ky low dogmatics. Bord believed the results indicated that dogmatism is a general defense mechanism, with reliance-on-authority functioning to reduce anxiety. This confirmed the previous studies of Rokeach (1960) and Vacnhiano, et all (1968). Terhune's (1964) study indicated that highly dogmatic individuals tend to accept group conformity and to value reinforcement by group thinking. Cummings (1975), in studying political ideology and behavior, found that the closed-minded segment of the citizenry is more likely than the open-minded segment not only to resist institutional and policy change but also to support authoritative policies which curtail socio-political deviancy, and serve to perpetuate existing institutions. Renuart (1974) found similar results among the
secondary school teacher population. Steffensmeier (1976), from investigating the relationship between dogmatism and social distance attitudes toward hippies, found that dogmatic persons are generally intolerant of those who hold belief systems different from their own. This was substantiated in Lorentz's (1972) study investigating attitudes toward marijuana.

Jamias and Troldahl (1965) found a -.40 correlation between dogmatism and innovation in a social system where the value for innovation was low. But in a social system where the value for innovation was high the correlation between dogmatism and innovation was only -.09. They concluded that highly dogmatic individuals living in social systems with a high value for innovation will adopt new recommendations more readily than highly dogmatic individuals in social systems having low value for innovation. However, low dogmatic individuals have a relatively high adoption rate regardless of the social system.

Research findings on the relationship between level of dogmatism, and intellectual ability showed much inconsistency (Zagona \& Zurcher, 1965). The variability in research findings seemed to be a product of how various researchers operationally defined cognitive ability. That is to say, psychologists did not agree on how to best estimate cognitive ability (Guilford, 1967; Wesman, 1968). Some researchers assumed that cognitive ability is best reflected by the ability to learn. With recognition of this difinition as a basis for measurement, consistently negative relationships were found between dogmatism and cognitive ability (Adams \& Vidulich, 1962; Costin, 1965; Ehrlich, 1961; Frumkin, 1961; Rebhun, 1966). But when scores on group administered intelligence tests were used as the index of cognitive ability, no consistent relationship appeared
(Christensen, 1963; Ehrlich, 1955; Rokeach, 1960; Zagona \& Zurcher, 1965). Interestingly, when Uhes and Shavers (1970) introduced convergentdivergent operations as the intervening factors, they found that their subjects, high school students with low dogmatism, had superior fluency, flexibility, origniality, and composite divergent ability scores as compared to highly dogmatic students. Mean scores on flexibility, originality, composite divergent, and composite covergent abilities tests were higher for low dogmatic students in homogenious populations in terms of general intelligence. Highly dogmatic students performed convergent operations better than they performed divergent operations, while low dogmatic subjects performed both operations equally well.

Finally, Vacchiano, Strauss, and Schiffman (1968) provided
perhaps the most conclusive description of dogmatic individuals as ones who seem to have a need to receive support, encouragement, and understanding from others; intolerance for understanding to feelings and motives of others; and an avoidance in changing their environment or daily routine. Dogmatic subjects lack self-esteem, are doubtful about their own self-worth, are anxious, lack self satisfaction, are non-committal and defensive, and are dissatisfied with their behavior, their physical state, their own personal worth, and their adequacy. Personality maladjestment and instability seem to underlie dogmatism. Dogmatic subjects are low in ego strength, frustrated by changeable conditions, submissive and conforming, restrained, diffident, timid, tense, impatient, and conservative in respect to establishments. In regard to theirconservatism, the dogmatic subjects are confident in what they have been taught to believe, they accept the tried and true despite inconsistencies, and
are cautious and compromising in regard to new ideas, generally going along with tradition.

Dynamics of Role-Personality Interaction

In order to support the rationale of the study, the researcher employed the concept of role-personality conflict.

Gibson, Ivancevich, and Donnelly (1973, p. 274) stated that rolepersonality conflict "occurs when role requirements violate the basic values, attitudes, and needs of the individual occupying the position." From the literature, it is apparent that with a high level of dogmatism in their belief system, individuals will find their personalities conflicting with the role expectations of university professors. With this kind of personality tendency, it is hard for highly dogmatic university professors to exist in an institution where conformity, authority and conservatism are not highly valued. They would have a difficult time adjusting themselves to tolerate diversified ideas and opinions from their colleagues and students. Without much confidence in themselves, lacking either self-acceptance or self-satisfaction, they doubt their ability to perform their tasks effectively or be satisfied in their jobs.

However, there is limited research directly supporting the relationship between dogmatism and job satisfaction. Nevertheless, the following research deals with the relationship of dogmatism or authoritarianism to various aspects of organizational behaviors which indirestly supports the rationale as well as suggests how the study should be conducted and what aspects should be considered.

Reported research has illustrated the significant relationship between dogmatism and performance. Among college students, Ehrlich (1961) revealed that dogmatism and achievement in an introductory sociology course were negatively related. Christensen (1963) used an essay test as a criterion but found no relationship between dogmatism and achievement. Kemp (1966) illustrated that highly dogmatic students had lower scores on measures of critical thinking than did the low dogmatics. Steininger (1970) also found similar evidence that low dogmatic students tended to have better grade point averages and SAT scores than the highly dogmatic students.

The same nature of relationship was found among older subjects. Victor (1976), introducing field dependence/independence as other intervening factors found that neither dogmatism nor field independence alone predicted the job performance, but the interaction between the two variables significantly predicted the criterion. Among 50 master's level students in an intern training program for tearhers of ewotionally disturbed children, the field dependent/highly dogmatic person was chosen less often by his peers as competent, while the field independent/1ow dogmatic person was chosen more often by his peers. Funk and Carters (1971) study, using simple correlation, found only a slight negative relationship (Gamma $=-.19$ ) among adult educator subjects. Steffre, King, and Leafgren's study (1962) showed that counselors most chosen by their peers as competent were among the low dogmatics.

Research has been reported substantiating the relationship between dogmatism and interpersonal relationships. Rosenfeld and Nauman (1969) found that dogmatic women in the dormitory situation became
increasingly negatively evaluated by their peers. Yet, dogmatic subjects were able to maintain contact with their peers by initiating most of the interaction because of their interpersonal style, particularly their insensitivity to negative receptions.

There has also been research done by students from the school of "Contigency Approach" to administrative science (Dressler, 1973; Sadler, 1970; Tosi, 1973; Vroom, 1959) who investigated subordinates' authoritarianism and the nature of their job satisfaction. However, most researchers introduced other interactional variables such as types of leadership task or administrative styles. Schuler (1976), among the latest researchers of the school, found that participation was satisfying to low authoritarian subordinates regardless of the degree of the task repetitiveness but was satisfying to high authoritarian subordinates only on tasks wis low repetitiveness.

These findings, however, imply that studying the relationship between dogmatism and job satisfaction will not be effective or yield enlightening results unless some interplaying variables are seriously considered. More directly, the study should be conducted to find the interaction of dogmatism and selected variables upon job satisfaction. The following review of literature suggests that variables related to the cultural and situational dimensions have some significant probabilities of intervening the study.

## Cultural and Situational Dimensions

## Dogmatism as Determined by Culture

In the previously reviewed literature, open-mindedness was found
to represent a higher level of functioning than closed-mindedness. The open-minded individual was described in the literature as flexible, tolerant of new ideas and changing conditions, efficient, more theoryorientsd, $\dot{d}$ aptable, energetic, outgoing and enterprising, forceful, and not particularly anxious. However, Vande Loo's (1975) view was different. Vande Loo saw open-mindedness as a reflection of a person's adaptation to social force, particularly to contemporary technological society. Fromm (1955), Toffler (1970), Ellul (1964), Mumford (1966), Halberstam (1972), Maccoby (1976) and others commented on the emergence of such values as adaptability, efficiency, detachment, rational intellectual functioning, teamwork and winning, and the ability to sell oneself and one's ideas in the technological society, especially in the white-collar and professional sector. In such a society, then those qualities mentioned above in the description of the openminded person become functionally adaptive.

In regarding the society as a social system and using Parsons' (1951) explanation, it can be said that the role-expectations of a citizen in an affluent society do require a low level of dogmatism or authoritarianism in order to function effectively in the system. However, this may not be the case for the less affluent or agrarian society. While there were numerous studies supporting the relationship between dogmatism or authoritarianism and anxiety or neuroticism, Mehryar (1970) found no evidence supporting the implicit association between the two. Noticeably, Mehryar's subjects were from students attending a university in Iran where the general population was considerably authoritarian while the other researchers drew their subjects from a more openminded environment, mostly in the United States. Vande Loo (1975) also concluded that openmindedness
does not necessarily represent a higher, more healthy and productive level of functioning. It reflects an adaptation to the social, economic, and cultural conditions of an affluent, technological, marketing.

## The Role of University Professors as Determined by Culture

In studying the organizational behavior of academic personnel within a university, the external environment, though it is often neglected, is one of the most important factors to consider.

Parsons (1951) observed that "a fundamental principal about the organization of living systems is that their structures are differentiated in regard to the various exigencies imposed upon them by their environment" (p. 8). Getzels, Lipham, and Campbell (1968) stated that the expectations from behavior in a given institution nüt only derive from the requirements of the social system of which the institution is a part, but also are related to the values of the cuiture and the environment which is the context for the particular social system (see Figure 3).


Figure 3 An illustration of the cultural dimension of behavior in a social system. From Getzels et al. (1968, p. 105).

In any society and culture, there are always constraints that the environment places on the university or college (Richman \& Farmer, 1974). In the United States, though the university has maintained a great deal of autonomy in administration, the constraints are apparently from various groups and organizations. For example,
... athletic rules are in part imposed by the relevant conferences; the state legislature imposes money constraints and legal sanctions; the federal government states in its research grants how the money is to be used; private donors give gifts under various conditions (p. 73).

In Thailand where the political culture has not yet been fully developed and political participation is considerably low, the public administration is centralized and in the hands of a few ruling groups. The central government appears to be the major source of constraint on the public universities.

Because of different culture and environment, universities are variously organized. As Goheen (1969) illustrated,

One can point to the oligarchic self-governance enjoyed by the professors in European countries, or the monarchical presidencies that appeared in certain late nineteenth century American institutions, or to the many forms of academic organization to be found on today's campuses- none quite like the other (p. 7).

Thailand is no exception. With its own unique history of higher education, universities have always been the bureaucratic agents of the gnvernment. In the United States and other affluent countries, it is known that colleges have a liberalizing effect on young people (Feldman \& Newcomb, 1969). To a much stronger degree, universities in Thailand have been suspected of being the political hotbed of the lefts or the ruling cliques' opponents. It is understandable that the establishment has
always been observant regarding the university affairs of most campuses. In the past, the university rectors were among the highest ranking members of the ruling groups, which included premiers, vice premiers, ministers, and sometimes, the Secretary of the Police Department (equivalent to the FBI director in the United States).

The role of university professor in Thailand seems to be in conflict. Universally, like most university professors all over the world, they are expected to be innovative, scholastic, and in some areas, to provide social criticism. On the other hand, locally, as governmental bureaucrats, who are subjected to direct and indirect sanctions from the general public as well as ruling groups, they are expected to perpetuate conformity among their students and colleagues. Apparently, their professional expectations can hardly be congruent with the role of bureaucrats or "hands" of the establishments. This, according to Parsons' (1951) explanation, is called "role conflict" which means,
... the exposure of the actor to conflicting sets of legitimized role expectations such that complete fulfillment of both is realistically impossible.

Parsons further explained that it is necessary to compromise, that is, to sacrifice at least some of both sets of expectations, or to choose one alternative and sacrifice the other. In any case the actors, the university professors, are exposed to negative sanctions. Exposure to role conflict is an obvious source of strain and frustration in that it creates a situation "incompatible with a harmonious integration of personality with the interaction system" (Parsons, 1951, p. 282). So it is concluded that university professors in Bangkok-Thonburi Metropolitan City, Thailand, whe are expoged to the role-conflict situation will have
more frustration in their jobs. That means they will have a lower level of job satisfaction than the others.

However, not all university professors are exposed to the same level of such role conflict. Among all fields of teaching and specialization, social sciences, especially economics and political sciences, are the ones most likely subjected to the role conflict (Ladd \& Lipset, 1975).

The cultural impact not only creates role conflict, but may cause role-personality conflicts also. Opinions upon their teaching and higher education in general may be influential factors. Campbell (1958) found that teachers at the grade school level, with a low degree of self-role conflict in the teaching situation, rate themselves higher in teaching satisfaction. University professors who have opinions about their teaching and higher education conflicting with the expectations of the ruling groups may be found expressing a low level of job satisfaction.

## The Situational Dimension

To perform social research in a society that has so much uncertainty in its politics like Thailand, the researcher has to regard political happenings as a significant factor of the study. Since the 1932 Revolution which brought an end to the absolute monarchy, the country has been plagued by coups d' etat and power seizures by the military. The "Student Revolution" (Zimmerman, 1974) of October 14, 1973, brought a change to Thailand's political history by, at least, wresting the power from the military establishment. In the process a new pattern of politics has been created and the thai political equation is unlikely to ever be : the same again. Among the higher education circuits, universities in

Thailand have benefited from their greater role in the national economic and social development since the early 1970's. The greatly increased student population required more and better educated personnel and eventually resulted in relaxing the rigid centralization. Universities have gradually gained autonomy in their own affairs, but this cannot be compared to the change after the "Student Revolution" which marked the highest point in the evolution of university administration. The political pressure from the leftists, liberals, and constitutional democrats forced the universities to change their administrative styles. Some administrators, known for their paternalistic behaviors, were ousted. The facuity, along with students, gained much more power in university affairs. The election system was introduced to many campuses replacing the old process of selecting important administrators such as rectors, deans, and department heads. Political pressure seemed to change the university administration from the bureaucratic model to the "collegium" or perhaps the "anarchic mode1" during the three years after the "Student Revolution." Though the internal conilicts ran high, many led to constructive solutions such as the creation of faculty senates and "due process" in disciplinary administration. During this period, university professors enjoyed great academic freedom. The elected civilian governments, either wanting to show their open-mindedness in a democratic fashion or being busy in political turbulence, did not interfere with the university administration.

On October 6, 1976, the political unrest ended, at least in the metropolitan area, as well as the experiment in democracy. The National Administrative Reform Council, composed of high ranking military officers, staged another coup d' etat. To many foreign observers as well as Thai
liberal sectors, the return of authoritarian military rule was a disappointing setback in the long and painful struggle toward some form of democracy. But to the rightists or conservative groups, it brought a sigh of relief, and the end of increasing political instability and "incipient anarchy" (Darling, 1977). However, universities had to pay their tolls for this external occurrence. Some prominent professors, including a rector, fled abroad. Some new rules and palicies were imposed upon teaching in sensitive fields such as political sciences and economics. üniversity professors, by order from the Office of University Affairs, were to follow the new guidelines carefully in teaching in such areas. Any vidlation might result in imprisioment or other form of disciplinary action for the charge of being "dangerous to society" or "communist instigators." However, this period, as termed by some observers the "Witch Hunt Era," did not last long. The civil government backed by the military establishment was becoming more and more alienated from even their own supporters. Finally, on October 20, 1977, the same group of military officers that supported the civil cabinet staged another coup d' etat and ended one of the most repressive periods of the country. During this period it can be explained that the role of university professors as the aril of the establishment was revitalized while the role of researchers, innovators, and social critiques was suppressed.

## Consideration of the Other Variables as Related to the Study

Besides the cultural and situational dimensions already discussed previously, there are siili other variádes worth consideration for study. They are: (1) rank and appointment, (2) nature of work and work load,
(3) institutional characteristics, (4) education, (5) years of experience, (6) teaching vs. research orientations, (7) income, (8) marital status and number of children, (9) age, and (10) sex. These will be discussed in the subsequent sections.

## Rank and Appointment

Lichtman (1970) studied correlation of the organizational rank in a group of government employees and found that significant differences existed in job satisfaction by rank, and that the higher the rank, the higher the level of job satisfaction. Sprague's (1974) research indicated that among the faculty members at a large state university in the United States, tenured members were significantly more satisfied with their work and their pay than non-tenured members.

In Thailand where most university professors tend to be more localistic and bureaucratic, and less research-oriented than professors of most large state universities in the United States, rank seems to be a major determinant of job satisfaction. The higher the academic rank one has, the higher will be job satisfaction.

The Nature of Work and Work Load
Cohen's (1972) study of working efficiency illustrated that the faster the work pace, the poorer the performance. Athan and McCord (1973) found that, at a newly established teaching hospital in California, 77 percent of employees and 85 percent of administrators favored some form of reduced workweek schedules if it did not reduce their income. Work load seems to be an indicator of job satisfaction in most organizations if other factors are held constant. Some indicators of work load of
university professors can be identified as (1) hours spent in formal instruction, and (2) total number of students at all levels enrolling in their courses. In the university system in Thailand, teaching load is usually standardized and distributed among teaching staff. Some staff have less or no teaching mostly because of these reasons; (1) assuming administrative positions, (2) doing research, (3) being newcomers and not: yet assigned teaching jobs, and (4) serving the government in other capacities, mainly as consultants and committee members.

Besides their teaching load, the nature of their work may determine university professors' job satisfaction as well. In most universities, the prestige and challenge of working with advanced students seems to be a major source of job satisfaction among qualified faculty members (Blau, 1973, p. 90). Sprague's (1974) study was also found to be supportive of this statement. It indicated that faculty who were full members of the graduate faculty were more satisfied with promotion than those faculty who were associated members or not members of the graduate faculty.

## Institutional Differences

Though all institutions selected for the study share similar characteristics, they do have differences deserving consideration. Among all universities in Thailand, Thammasat University was apparently most affected by the political events. During the first week of October, 1976 its campus was occupied by thousands of student demonstrators. On October 6,1976 at least 30 casualities were the result of police raids, and rightists' retaliation; several hundreds were wounded, and approximately

3,000 demonstrators were arrested (Nations, 1976). A11 took place on the Thammasat University's campus. This university was the last to reopen after the incident. Iis faculty members were most affected. The student-elected rector fled abroad while his close associates were demoralized by the organizational shake-up, internal conflict, and close observation from the secret agents. It is assumed that the Thammasat faculty members would have lower job satisfaction than others.

## Education

The education of university professors can be classified into at least three different aspects such as: (1) years of educational training, (2) field of the educational training, and (3) location of the educational training.

In Thailand, years of training or earning advanced degrees, especially doctoral degrees, is not just considered on the basis of its functional value; it is equated with prestige as well. Dhirabegin's (1973, pp. 29-30) study indicated that now a doctorate has become a status symbol as much as the title of the Sakti Na system (the privilege of land holding according to the aristocratic hierarchy) of the absolute monarchy era. It pointed out that among Thai bureaucratic elites, there is a strong relationship between the level of education of the elite and political attitudes- the more educated, the more liberal. Among various studies of dogmatism, it is of ten found that level of education is negatively related to dogmatism. It is concluded that years of educational experience not only indicate the level of job satisfaction but also the level of dogmatism.

Field of educational training was found to relate to dogmatism and job satisfaction. An early study on occupational membership and dogmatism by Kemp (1957) showed that people with a closed, or dogmatic belief system, concentrate on commercial pursuits, lean toward military careers, and enter administrative fields. Open, or less dogmatic, subjects pursue occupations such as medicine, ministry, social work, psychology, occupational therapy, and teaching. Hansen and Johansson(1974, pp. 196201) found persons with closed or dogmatic systems congregated on conventional and realistic occupations that are preferred by those who are rigid and dominant, who avoid abstract thought, and who work in technical, skilled trades or computational occupations. Non-dogmatic persons with open belief systems entered artistic and investigative occupations. These persons may be described as analytical, imaginative, introspective, and sensitive, choosing work in academic, musical, artistic, and writing fields.

Emmerson (1968) found that fields of study relate to political beliefs too.

Evidence from 19 countries show, on the whole, students in the social sciences, low, and the humanities are more likely to be politicized and leftist than their colleagues in the natural and applied sciences" (p. 403).

Within a university system, field of study has shown a significant relationship to the belief system as well as political opinions. Ladd and Lipset (1975, p. 69) explained that a discipline's subject matter requires a professional work experience, defines the groups and interests which serve as point of reference and association, and seems to attract people of a particular value orientation; together these factors
contribute to the formation of distinctive discipline subcultures. Once formed, such subcultures apparently become more than the sum of their contributing parts.

There is some research supporting the relationship between field of study and job satisfaction. Rada (1975) found that community college instructors with occupational orientations are more satisfied with their jobs than instructors with academic orientations. At the university level, the result may be found to be the opposite because of different role expectations. Sprague (1974, p. 98) indicated that, within a university, the colleges in which salary was the most important predictor of faculty satisfaction were those in which college teaching is about the highest salaried and most prestigious effort that this group can obtain. It can be explained that, for example, a Ph. D. in History, Philosophy, or Arts can hardly find other jobs more prestigious or better paid than teaching in a university. On the other hand, those colleges in which length of experience was the most important satisfaction variable tended to be those with a professional orientation, such as Dentistry, Medicine, Economics, and Business. Sprague explained that these faculty members were not interested in money or they would not have been in a university setting in che first place. They would make more money practicing their professions in the outside world.

Location of the educational training can be significantly related to dogmatism and job satisfaction of university professors in the societal setting of Thailand. Students from a comparatively authoritarian society like Thailand may find themselves accepting beliefs and values of affluent
society, such as democracy, political tolerance, and academic freedom while living in the academic environment of the western countries with comparatively low-authoritarian atmospheres. Conversely, students who have all their educational experience within an authoritarian society may find themselves accepting the local beliefs and values, and even though they have an opportunity to study western thought, beliefs, and values, they tend to reject them. It is assumed that university professors' educational experience abroad may have an impact upon their belief systems such as dogmatism.

While Thai people tend to reject western values different from their own, they accept education from the western world as a symbol of status and prestige. Degrees and educational experience from the western countries are always highly valued among business as well as governmental circles. It is expected that studying abroad may be a source of job satisfaction.

## Working Experience

While it has been found that the working experience of blue-collar workers with highly repetitive tasks is negatively associated with job satisfaction, Sprague (1974) is one of many researchers who found that the experience of managerial and professional personnel is positively associated with job satisfaction. Sprague indicated that the more total professional teaching experience university professors had, the more they were satisfied with their work, pay, and supervision. This finding is compatible with that of Rempel and Bentley (1970) who found increasing satisfaction among secondary teachers with long terms of experience.

## Teaching vs. Research Orientation

Caplow and McGee (1958, p. 82) stated,
It is neither an overgeneralization nor an oversimplification to state that in the faculties of major universities in the United States today (1956) the evaluation of performance is based almost exclusively on publication of scholarly books or articles in professional journals as evidence of research activities.

Ladd and Lipset (1975, p. 144) also categorized professors according to their professional achievement into "high achievers" and "low achievers." Higher achievers are faculty who have gained positions at major universities and also maintain a high level of scholarly productivity, and low achievers are faculty at institutions of lowest quality who have contributed little to active scholarship. They found the "research culture" as an expression of intellectuality that fosters a critical and, in the American context, a liberal politics, whereas the "teaching culture" associated with the transmission of knowledge rather than original inquiry, sustains more conservative orientations.

In Thailand, though the research function of the university has not been emphasized, research oriented instructors tend to find greater achievement and satisfaction than teaching oriented instructors. Furthermore, because of the education and values of intellectuality and academic freedom of research oriented instructors, it is believed that "research culture" will be negatively related to dogmatism.

Income
Lipset (1959, p. 485) stated that the poorer strata everywhere are more liberal or leftist on economic issues; they favor more welfare state measures, higher wages, graduated income taxes, and support of
of tiade unions. However, Tygart (1975, pp. 298-308) seemed to reject the statement after finding that, for highly educated individuals such as university or college students, the multidimensional concept of political liberalism-conservatism appears unwarranted on the individual level of analysis. Tygart believed Lipset's classic "working class authoritariani.sm" had probably emphasized the wrong variables. Social class or income tended to have similar effects for middle as well as working-class individuals for political issues and behavior generally. Tygart's finding supported Gabennesch's (1972, pp. 857-875) contention that authoritarian is a world view irrespective of social class of correspondents. However, income is to some degree related to the level of education which means the better educated population will have greater capacity to earn more. As it was found that the level of education negatively related to authoritarianism, such as in the comparison of British university students and blue-collar workers (Rokeach, 1960), it is assumed that the negative relationship between dogmatism and income may. also be found among tike university professor population.

Marital Status and Number of Children

Having spouses or children means an added responsibility that can affect persons' belief systems as well as their job attitude. Freedman and Coombs (1966) and Saxton (1972, p. 309) observed that those who have children after marriage find themselves under great economic pressure, particularly if they marry at an early age. The teaching profession in Thailand is not particularly well paid. Most university professors with spouses, especially non-working spouses, and children will find themselves
having greater need for income, linited opportunities for education, or difficult decisions involving present sacrifices for future gains. It is assumed that marital status and the number of children will have an effect upon university professors' job satisfaction.

Age
It is generally argued that as a person becomes older, he tends to become more conservative and intolerant toward differences of ideas, preferring the maintenance of the status quo, stability and security (Downs, 1967, pp. 267-268). Stouffer's (1955) cross-national survey of attitudes in the United States was one of the early studies supporting this argument. It was found that older people were less tolerant toward non-conformists and other related issues. This was true even for the upper educational groups. Birren (1964, p. 189) was among many researchers who discovered the relationship between dogmatism and rigidity. In Thailand, Dhirabegin (1973, p. 40) showed that, among the studied elite bureaucrats, there is an association between age and conservatism. Perhaps, it might be suggested that among university professors, age could be significantly related to the belief system, such as general authoritarianism or dogmatism.

Age was 2 significant variable in predicting satisfaction with pay and promotion among university professors (Sprague, 1974). The older the faculty members, the greater their satisfaction with pay. On the other hand, the older they were, the less satisfaction they tended to have with promotions.

Sex
Caplow and McGee (1958, p. 226) stated, "Women scholars are not taken seriously and cannot look forward to a normal professional career." In the late 1960, Bayer and Astin (1968, pp. 191-199) indicated that female scientists earned less than male scientists independent of field of specialization, employment setting, and academic rank. La Sorte (1971, p. 267) also supported the argument that men are always rewarded above women regardless of whether they do research in addition to teaching or teaching only.

Because of the disadvantageous position women have in the working world, they are known to exhibit lower levels of job satisfaction than men (Smith, Kendall, \& Hulin, 1969). However, Centers and Bugental (1966) and Meier (1964) showed that when treated as equal to males, females had equal or possibly higher levels of satisfaction. Sprague's study also supported this content among the university professor groups.

In Thailand, university teaching is comparatively non-discriminatory toward women (unlike other bureaucratic jobs such as judicial, local administrative, and military careers). In fact, in some areas such as education, and especially elementary education, women have exhibited dominant roles and accomplishment. It is assumed that women, in some areas of specialization, may exhibit greater job satisfaction than men. It can be said that sex is a significant variable in this study.

From the theoretical framework and supporting literature, it can be concluded that university professors are "ideally" and "manifestly" expected to be nonconforming, innovative, and openminded. Consequently, when individuals in the roles of university professors possess these
qualities which are congruent to the role expectations, they are likely to be satisfied with their jobs. Conversely, those who possess the opposite qualities, such as having conforming, non-innovative, and closed-minded tendencies, they are likely to be dissatisfied with their jobs. However, not all aspects of role expectations are mainfest nor universalistic. Thailand, an agrarian society having a comparatively authoritarian culture, provided a.kind of external environment that is different from that of the west. Eventually, it creates discrepancy of role expectations of university professors. The rather localistic roles expected by the conservative ruling groups are incompatible with the universalistic and ideal roles cherished by academics. This discrepancy was even more extended because of the political happenings during the last five years and resulted in role and role-personality conflicts among some segments of university faculty. So it is predicted that there are some culturally and situationally related variables having interactional effects upon the relationship between dogmatism and job satisfaction. The researcher also reviewed other variables such as rank and appointment, nature of work and work load, institutional characteristics, education, years of experience, teaching vs. research orientations, income, marital status and number of children, age, and sex. These variables are found to relate either or both to dogmatism and job satisfaction. Some may have an intervening effect on the study and should be statistically controlled.

## Hypotheses

1. General hypothesis. Considering the theoretical framework and related literature, it may be hypothesized that there are interactions between dogmatism and selected variables upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.
2. Specific hypotheses. In order to facilitate analyzing the data derived from this study nine conceptual hypotheses were tested. They are as follows:
3. There are differences in levels of dogmatism of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to each of 23 demographic items.
4. There are differences in levels of dogmatism of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to the levels of perceived social responsibilities.
5. There are differences in levels of dogmatism of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to the opinions upon higher education issues.
6. There are differences in levels of job satisfaction of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to each of 23 demographic items.
7. There are differences in levels of job satisfaction of university professors, in Bangkok-Thonburi Metropolitan

City, Thailand, grouped according to the perceived social responsibilities.
6. There are differences in 1eve1s of job satisfaction of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to the opinions upon higher education issues.

The reviewed literature suggests that demographic, political, and situational factors may have some impact upon the study. This will involve variables such as field of study, self-perceived social responsibilities, and the perceived effects. These can be conceptually predicted as follows:
7. There is an interaction between the major field of study and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.
8. There is interaction between the self-perceived social responsibilities and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.
9. There are interactions between perceived political effects and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.

CHAPTER III

DESIGN OF STUDY

## Population and Sampling

The develorment of higher education in Thailand, like many other small countries with administrative centralization, has always been urban oriented. Most universities are located in the metropolitan area of Bangkok-Thonburi Metropolitan City, the capital of the country. The researcher considered political impact upon universities as a major factor in this study, therefore, the plan was to exclude institutions outside the vicinity of Bangkok-Thonburi Metropolitan City where the faculty and student population have experienced much less political impact because of comparatively isolated locations.

The sample size of 600 , or 10 percent, of the usable population was randomly selected from the list of academic personnel of higher institutions located in Bangkok-Thonburi Metropolitan City obtained from the Office of University Affairs. All academic personnel included in this study represent the following titles: (1) professors, (2) associate professors, (3) assistant professors, and (4) instructors. These included academic personnel who also assume administrative positions such as rector, dean, and department head. Since academic personnel of the university demonstration schools and graduate assistants have different characteristics
from the defined "university professors," they were excluded from the study.

## Procedure for Collecting Data

## Instruments

A survey was made to find suitable and valid instruments for the purpose of the study. A questionnaire of 151 items was constructed, with some adaptation for easy scoring, for indices of each of the independent and dependent variables. They were as follows:

1. Demographics (1-23). The first 23 items were selected and adapted from Ladd and Lipset's (1975) study of academic personnel and their political beliefs. The questions were designed to gather more detailed information than the usual age, sex, and level of education. Sprague (1974), Rada (1975), and Stephens (1974) were among many researchers who found these items important in studying characteristics of academic personnel and their job satisfaction. The researcher decided to construct the demographic part with three purposes: (1) to understand the diversified characteristics of university professors, (2) to test hypotheses concerning differences in dogmatism and job satisfaction among various groups, and (3) to utilize the understanding in controlling the possible variables intervening between dogmatism and job satisfaction.
2. Dogmatism Scale (24-63). A11 of the 40 items were from Form E of the Dogmatism Scale (Rokeach, 1956). The scale was designed to measure individual differences in openness or closedness of belief systems. Form E was comprised of the 40 most validated items from 89 items totally used throughout various revisions. Each item went beyond any specific
belief content to penetrate the structure of how the belief was held. People who held viewpoints as diverse as communism, capitalism, or catholicism, should all score on one end of the continuum on the $\underline{D}$ Scale. In this questionnaire, the scores were converted to a 1 to 7 scale, as suggested by Rokeach (1960), with the following assignment:
(1) I agree very much. $=7$
(2) I agree on the whole. $=6$
(3) I agree a little. $=5$
(4) I disagree a little. $=3$
(5) I disagree on the whole. $=2$
(6) I disagree very much. $=1$

Administering Form E of the D Scale to 80 students at Berbeck College in England and 60 English workers, the split-half reliabilities were reported at the levels of .81 and .78 accordingly (Rokeach, 1960). In determining the validity of the $\underline{D}$ Scale, it was found to be correlated with the $E$ Scale (Adorno, 1950) at the level of .62 for the English College student group and . 77 for the English worker group.

The $\underline{D}$ Scale as intended by Rokeach did not have the discriminant value in determining political beliefs like the F Scale. Rokeach constructed the D Scale to be a measure of general authoritarianism or closed-mindedness. It differed from the $F$ Scale in that general authoritarianism was viewed as concerning the way an individual adhered to a belief and not the specific content of that belief. He claimed that the $\underline{F}$ Scale was concerned with the specific content of a belief, such as authoritarianism of the right or fascism. The research data seemed to support Rokeach's intention (Robinson \& Shaver, 1976, pp. 418-429).
3. Social Responsibility Scale (64-71). Berkowitz and Lutterman (1968) constructed this scale in an attempt to assess a person's traditional social responsibility, and orientation toward helping others even when there is nothing to be gained from them. The total 8 items of the scale are especially tied into traditional values and are therefore, likely to have essentially a conservative individualist theme. The scale is also conceived of as a polar opposite of alienation. The original five response options were adapted to fit the format of parts 2 and 3 of the questionnaire which have 6 options. The "responsible" direction is: agreeing on items 65, 68, 70 , and 71 ; and disagreeing on items $64,66,67$, and 69.

The internal consistency of the scale, as administered it to 766 Wisconsin adults in early fall, 1963 was "very satisfactory," although no statistical data were reported. No test-retest data were apparently collected. Berkowitz and Lutterman also found some behavioral correlates. Since these are based on respondent descriptions, they cannot be considered as completely objective estimates of validity. Among both working class and middle-class respondents, those scoring high on the scale were more likely to: (1) make financial contributions to educational or religious institutions, (2) be active in organizations or church work, (3) show great interest in national and local politics and to be active politically, and (4) to vote in elections and know the name of candidates for office.

It was concluded that all in all, persons having high scores on the scale generally were least inclined to deviate from the political
traditions of their class and community.
4. Opinions upon Higher Education Issues (72-79). The first 6 items of this part were selected from Ladd and Lipset's (1975) book, The Divided Academy: Professors and Politics. They were constructed to evaluate university professors' opinions upon higher education issues such as, the role of institution in student's personal and intellectual development, faculty-student relation, institutional roles of social and community involvement, student politics on campus, and academic freedom. The last two items (78 and 79) are to appraise the political impact upon the work of university professors during October 14, 1973 to October 6, 1976 and after October 6, 1976 to October 20, 1977.

There were no reliabilities and validities of these items reported. However these questions are necessary in assessing the university professors' roles, and their job satisfaction.
5. Job Description Index (80-151). The JDI (Smith, et al, 1965) was designed to measure job satisfaction in the areas of pay, promotion, supervision, type of work, and the people on the job. The instrument consists of 72 items-- 18 in each area of work, supervision, and people subscales and 9 each in pay and promotions. Each grouping consists of a list of adjectives or descriptive phrases. The respondents were asked to write " 1 " for each item which describes his pay (promotion, etc.), " 2 " on which they could not decide, and " 3 " for each item which did not describe it. When the respondent answered " 1 " (yes) to a positive item or " 3 " (no) to a negative item on the test he received three points. If the respondent put a " 2 " (undecided) to any item he received two points. One point was scored for answering " 1 " to a negative or " 3 " to a positive
item.

In determining its reliability, various researchers found its corrected split-half internal consistency coefficients exceed . 80 (Hulin, 1966). Its validity was determined by Hulin's observation of its correlation to turnover and a correlation coefficient of -.27 was reported among the population of female clerical employees.

## Administration of Instruments

After reviewing variuus techniques and a careful consideration of plans for the administration of instruments, the researcher was convinced that mailing was the most appropriate technique for the nature of the study and situation. Because of the extremity of political happenings during the last five years and especially after October 6, 1976 many university professors were reluctant to express their viewpoints concerning political and social problems openly or candidly. Mailing was selected as the method to assure confidentiality of responses. A total of 600 unnarked questionnaire packages were distributed to the randomly selected university professors during January 1978. Within the period of 60 days, 360 returns were collected and 335 or 55.83 percent of the total packages were usable.

## Treatment of the Data

The primary interest of the researcher was to evaluate the interactions of dogmatism and selected variables upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand. One-Way Analysis of Variance (ANOVA) and Factorial Analysis of Variance were utilized as the major tools for the analyses of the data. Their
definitions and applications to the study are presented as follows:

Analysis of Variance (One-Way)
It is a technique that is used to determine the significance of difference between more than two means. In Analysis of Variance, however, there is no direct comparison of means. Instead there is an inference about the difference between means by comparing the variance with samples to the variance between the sample means (Gellman, 1973, pp. 187-188). The following is the One-Way Analysis of Variance formula:

Among-Groups Variance Estimate: $\quad S_{A}{ }^{2}=\sum n_{i}(\bar{x}-\overline{\bar{x}})^{2}$ Subgroups of Unequal Size
$\bar{x}_{i}=$ the mean of the ith subgroup
$\overline{\bar{x}}=$ the number of the combined distribution of scores
$n_{i}=$ the number of scores in the ith subgroup

## Factorial Analysis of Variance

Factorial Analysis of Variance is the method that analyzes the independent and interactive effects of two or more independent variables on a dependent variable (Kerlinger, 1973, p. 245). It has various advantages over One-Way Analysis of Variance such as: (1) It enables the researcher to manipulate and control two or more variables simultaneously. (2) Variables that are not manipulated can be controlled. (3) It is more precise than a one-way analysis. And (4) perhaps most important, it enables the researcher to hypothesize interactions because the interaction effects can be directly tested (pp. 257-258).

Two-Way Analysis of Variance seems to fit the design of this
study well. In this method, the total sum of square ( $S_{S} \boldsymbol{T}$ ) will be divided into four components:

$$
\begin{aligned}
& S S_{T}=S S_{c}+S S_{R}+S S_{R \times C}+S S_{w C} \\
& \text { SS }_{\boldsymbol{T}} \quad=\text { the total sum of squares, generated from the } \\
& \text { deviation of each score from the mean of all } \\
& \text { scores, }(x-\overline{\bar{X}}) \\
& S S_{C} \quad=\text { the sum of squares for columns, generated from } \\
& \text { the deviation of each column mean from the mean of } \\
& \text { all scores, }\left(\bar{x}_{c_{i}}-\bar{x}\right) \\
& S S_{R} \quad=\text { the sum of squares for rows, generated from the } \\
& \text { deviation of each row mean from the mean of all } \\
& \text { scores, }\left(\bar{X}_{R_{l}}-\overline{\bar{X}}\right) \\
& S S_{\text {RXC }}=\text { the sum of squares for interaction, generated } \\
& \text { from the deviation of each cell mean from the } \\
& \text { value predicted for that cell on the assumption } \\
& \text { of no interaction } \\
& S S_{W C}=\text { the sum of squares within cells, generated from } \\
& \text { the deviation of each score from its cell mean, } \\
& \left(x-\bar{x}_{c E}\right)
\end{aligned}
$$

Total Sum of Squares

(Nimium, 1970, p. 371)
Two-Way Analysis of Variance, or Two-Way ANOVA, was used in analyzing and testing Hypotheses Seven, Eight, and Nine.

## Posteriori Analyses

When the over-all E ratio was significant and there were more than two groups in the comparison, Scheffe's (1953) test was used to make all possible comparisons amog means.

Scheffe has shown that the probability is $1-\alpha$ that all possible contrasts will be captured by a set of intervals as presented by Kirk
(1968, p. 91) in the following formula:

$$
\psi-s \leq \psi \leq \psi+s
$$

where
 of the comparison, respectively. $S$ is given by

$$
S=\sqrt{(k-1)} F_{\alpha ; v_{1}, v_{2}} \sqrt{M S_{E R R O R}\left[\sum_{j=1}^{k} \frac{\left(c_{j}\right)^{2}}{n_{j}}\right]}
$$

Where $\begin{aligned} F_{\alpha} ; V_{1}, V_{2} \quad= & \text { tabled value of } F \text { for } V_{1} \text { and } V_{2} \text { degrees } \\ & \text { of freedom, }\end{aligned}$ $k \quad=$ number of treatment levels, $C_{j} \quad=$ coefficient of the contrast, and
$\boldsymbol{n}_{\boldsymbol{j}} \quad=$ number of scores in the $\boldsymbol{j}$ th treatment level.

In order for a comparison to be significant, it must be larger than $S$ as defined above.

The significance level of .05 and beyond was selected for all hypothesis testings and posteriori analyses.

## CHAPTER IV

FINDINGS OF THE STUDY

This chapter presents the analysis of the data collected in this study. The analysis pertains to demographic data and the nine hypotheses as stated in Chapter Three.

## Analysis of Demographic Data

Demographic data were gathered from each of 335 university
professors responding to the first 23 items of the questionnaire. All questionnaire returns were gathered during two periods: 245 were collected prior to the mid of January 1978 and 90 were gathered during the period of six weeks after. There was no significant difference in the way sample subjects of the two data collection periods responded to the questionnaire items. The information includes rank, appointment, nature of work, work load, institutional characteristics, education, years of experience, teaching vs. research orientations; income, marital status, number of children, age, and sex. These data are presented in Table 1 , along with frequencies in each category and the total percentages.

## Analysis of Data Related to the Hypotheses

This part deals with the statistical analysis of the problem of the study as stated in Chapter One. Nine hypotheses were tested and related statistical data were analyzed.

Table 1
Frequency Counts and Percentages of Demographic Variables


1. What is your present rank?

| (1) Instructor | 145 | 75 | 220 | 65.67 |
| :--- | ---: | ---: | ---: | ---: |
| (2) Assistant Professor | 82 | 12 | 94 | 28.06 |
| (3) Associate Professor | 7 | 1 | 8 | 3.38 |
| (4) Professor | 9 | 2 | 11 | 3.28 |
| (5) No response | 2 | - | 2 | .59 |

2. What kind of appointment do you have here?

| (1) | Regular with tenure | 234 | 68 | 302 |
| :--- | :--- | ---: | ---: | ---: |
| (2) Regular without tenure | 5 | 13 | 18 | 90.15 |
| (3) Special | 1 | 7 | 5.37 |  |
| (4) Visiting | 1 | 2 | 2.39 |  |
| (5) No response | 4 | - | 3 | .90 |

3. During the regular term, how many hours per week are you spending in formal instruction? (Give actual, not credit hours.)

| $(1)$ | None | 9 | 4 | 13 | 3.88 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $(2)$ | $1-4$ | 53 | 23 | 76 | 22.69 |
| $(3)$ | $5-6$ | 59 | 32 | 91 | 27.16 |
| $(4)$ | $7-8$ | 35 | 4 | 39 | 11.64 |
| $(5)$ | $9-10$ | 48 | 10 | 58 | 17.31 |
| $(6)$ | $11-12$ | 19 | 4 | 6.87 |  |
| $(7)$ | $13-16$ | 9 | 5 | 14 | 4.18 |

Note. Data from the first collection; data from the second collection; $\boldsymbol{c}_{\text {total }}$

Table 1 (Continued)

| Demographic | $\frac{\mathrm{f}}{\mathrm{~N}=245}$ | $\frac{f}{N=90}$ | $\frac{f}{N=335}$ | $\frac{\text { Percentage }}{\mathrm{N}=335}$ |
| :---: | :---: | :---: | :---: | :---: |
| (8) 17-20 | 8 | 1 | 9 | 2.69 |
| (9) 21 or more | 3 | 7 | 10 | 2.99 |
| (10) No response | 2 | - | 2 | . 60 |
| 4. What are your teaching responsibilities this academic year? |  |  |  |  |
| (1) Entirely undergraduate | 144 | 62 | 206 | 61.49 |
| (2) Some undergraduate, some graduate | 78 | 13 | 91 | 27.16 |
| (3) Entirely graduate | 12 | 10 | 23 | 6.87 |
| (4) Not teaching this year | 9 | 4 | 13 | 3.88 |
| (5) No response | 1 | 1 |  | . 60 |
| 5. About how many students, at all levels, are enrolled in your courses this term? |  |  |  |  |
| (1) None | 12 | 4 | 16 | 4.78 |
| (2) Under 25 | 25 | 10 | 35 | 10.45 |
| (3) 25-49 | 33 | 12 | 45 | 13.43 |
| (4) 50-99 | 57 | 17 | 74 | 22.09 |
| (5) 100-249 | 74 | 25 | 99 | 29.55 |
| (6) 250-399 | 15 | 5 | 20 | 5.97 |
| (7) 400-999 | 15 | 7 | 22 | 6.57 |
| (8) 1,000 or more | 11 | 9 | 20 | 5.97 |
| (9) No response | 3 | 1 | 4 | 1.19 |
| 6. At what institution are you employed? |  |  |  |  |
| (1) Kasetsat Undversity | 57 | 12 | 69 | 19.10 |
| (2) Chulalongkorn University | 37 | 6 | 43 | 12.84 |
| (3) Mahidol University | 49 | 15 | 64 | 19.10 |

Table 1 (Continued)


Table 1 (Continued)

|  | Demographic | $\frac{\mathrm{f}}{\mathrm{~N}=245}$ | $\frac{f}{N=90}$ | $\frac{\mathrm{F}}{\mathrm{~N}=335}$ | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (13) Humanities | 11 | 5 | 16 | 4.78 |
|  | (14) Industrial Arts | 4 | - | 4 | 1.19 |
|  | (15) Journalism | - | - | - | - |
|  | (16) Law | 3 | 1 | 4 | 1.19 |
|  | (17) Library Science | 4 | - | 4 | 1.19 |
|  | (18) Pure Sciences | 41 | 10 | 51 | 15.22 |
|  | (19) Archeology | 1 | 5 | 6 | 1.79 |
|  | (20) Anthropology | 3 | 1 | 4 | 1.19 |
|  | (21) Economics | 7 | 1 | 8 | 2.39 |
|  | (22) Political Science, Government | 9 | 18 | 27 | 8.06 |
|  | (23) Sociology | 7 | 3 | 10 | 2.99 |
|  | (24) Others | 12 | 2 | 14 | 4.18 |
| 9. Have you ever had educational training abroad? (If yes, please also answer 10 and 11.) |  |  |  |  |  |
|  | (1) Yes | 156 | 61 | 217 | 64.78 |
|  | (2) No | 88 | 28 | 116 | 34.63 |
|  | (3) No response | 1 | 1 | 2 | .60 |
| 10. In what country did you have your educational training? (In case more than one country, please indicate where you stayed the longest.) |  |  |  |  |  |
|  | (1) The United States, Canada | 98 | 52 | 150 | 44.78 |
|  | (2) European countries | 28 | 9 | 37 | 11.04 |
|  | (3) Asian countries | 19 | 2 | 21 | 6.27 |
|  | (4) Australia, New Zealand | 8 | 2 | 10 | 2.99 |
|  | (5) others | 6 | - | 6 | 1.79 |
|  | (6) No response | 86 | 25 | 111 | 33.13 |

Table 1 (Continued)
Demographic $\frac{f}{N=245} \quad \frac{f}{\mathbb{N}=90} \quad \frac{f}{\mathbb{N}=335} \quad \frac{\text { Percentage }}{-N=335}$
11. How many years did you study abroad?
(1) Less than 1 year
(2) 1-2
(3) 3-4
61
(4) 5 years or more
(5) No response

37
(5)

88

| 1 |  |  |
| ---: | ---: | ---: |
| 37 | 98 | 7.46 |
| 18 | 55 | 29.25 |
| 7 | 42 | 16.42 |
| 27 | 115 | 12.54 |
|  |  | 34.33 |

12. How long have you worked in the field of education?

| (1) | 1 year or less | 6 | 19 | 25 |
| :--- | ---: | ---: | ---: | ---: |
| (2) | $2-3$ | 27 | 28 | 5.46 |
| (3) | $4-6$ | 66 | 23 | 89 |
| $(4)$ | $7-9$ | 47 | 13 | 60 |
| (5) | $10-14$ | 49 | 2 | 26.57 |
| (6) | $15-19$ | 22 | 51 | 17.91 |
| (7) | $20-29$ | 20 | 2 | 15.22 |
| (8) | 30 or more | 6 | 2 | 7.16 |
| (9) No response | 2 | - | 22 | 6.57 |

13. How long have you worked at this institution?

| (1) | 1 year or less | 9 | 18 | 27 | 8.06 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (2) | 2-3 | 38 | 30 | 68 | 20.00 |
| (3) | 4-6 | 70 | 24 | 94 | 28.06 |
| (4) | 7-9 | 43 | 12 | 55 | 16.41 |
| (5) | 10-14 | 47 | 3 | 50 | 14.93 |
| (6) | 15-19 | 18 | 2 | 20 | 5.97 |
| (7) | 20-29 | 18 | - | 18 | 5.37 |
| (8) | 30 or more | 2 | - | 2 | . 60 |
| (9) | No response | - | 1 | 1 | . 30 |

Table 1 (Continued)
Demographic $\frac{f}{\frac{f}{N=245} \quad \frac{f}{N=90} \quad \frac{f}{N=335} \quad}$
14. In a normal week, what proportion of your work time is devoted to administration. (Departmental or institutional, including committee work)
$\begin{array}{ll}\text { (1) } & \text { None } \\ (2) & 1-10 \%\end{array}$
(3) 11-20\%
(4) $21-40 \%$
(5) $41-60 \%$
(6) $61-80 \%$
(7) $81-100 \%$

| 47 | 24 | 71 | 21.19 |
| ---: | ---: | ---: | ---: |
| 101 | 44 | 145 | 43.28 |
| 53 | 11 | 64 | 19.10 |
| 20 | 5 | 25 | 7.46 |
| 12 | 3 | 15 | 4.48 |
| 9 | 3 | 12 | 3.58 |
| 1 | - | 1 | .30 |
| 2 | - | 2 | .60 |

15. How many articles have you published in academic or professional journals?
(1) None
(2) $1-2$
(3) $3-4$
(4) $5-10$
(5) 11 or more
(6) No response
16. How many books or monographs have you published or edited, alone or in collaboration?

| (1) | None | 99 | 35 | 134 |
| :--- | :--- | ---: | ---: | ---: |
| (2) | $1-2$ | 91 | 36 | 127 |
| (3) $3-4$ | 32 | 14 | 46 | 37.91 |
| (4) $5-10$ | 16 | 4 | 13.73 |  |
| (5) | 11 or more | 5 | 20 | 5.97 |
| (6) | No response | 2 | - | 5 |

## Table 1 (Continued)

Demographic $\frac{f}{\frac{f}{N=245}} \frac{f}{\frac{f}{N}=90}$
17. Does your interest lie primarily in teaching or in research?

| (1) Very heavily in research | 9 | 16 | 25 | 7.46 |
| :--- | :--- | ---: | ---: | ---: |
| (2) In both, but leaning toward research | 88 | 22 | 110 | 32.84 |
| (3) In both but leaning toward teaching | 130 | 31 | 161 | 48.06 |
| (4) Very heavily in teaching | 16 | 19 | 35 | 10.45 |
| (5) No response | 2 | 2 | 4 | 1.19 |

18. What is your total income at this institution,
for the academic year?

| (1) | 15,000 bahts* or . 1 ess | 5 | 7 | 12 | 3.58 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (2) | 15,001-20,000 | 5 | 3 | 8 | 2.39 |
| (3) | 20,001-25,000 | 22 | 8 | 30 | 8.96 |
| (4) | 25,001-30,000 | 35 | 14 | 49 | 14.63 |
| (5) | 30,001-40,000 | 63 | 35 | 98 | 29.25 |
| (6) | 40,001-50,000 | 57 | 9 | 66 | 19.70 |
| (7) | 50,001-70,000 | 36 | 8 | 44 | 13.13 |
| (8) | 70,001 or more | 21 | 5 | 26 | 7.76 |
| (9) | No response | 1 | 1 | 2 | . 60 |

1.9. What is your annual income earned outside this institution? (academic and non-academic)
(1) 3,000 bahts or less
(2) $-3,001-5,000$
(3) $5,001-10,000$
(4) $10,001-30,000$ 153
15
16
16
14

| 25 | 178 | 53.13 |
| ---: | ---: | ---: |
| 8 | 23 | 6.87 |
| 22 | 38 | 11.34 |
| 17 | 31 | 9.25 |

Note. *20 bahts = 1 U.S. dollar

Table 1 (Continued)

|  | Demographic | $\frac{f}{\mathrm{~N}=245}$ | $\frac{f}{N=90}$ | $\frac{\mathrm{f}}{\mathrm{~N}=335}$ | $\frac{\text { Percentage }}{\mathrm{N}=335}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (5) $30,001-50,000$ | 18 | 10 | 28 | 8.36 |
|  | (6) 50,001 or more | 15 | 4 | 19 | 5.67 |
|  | (7) No response | 14 | 4 | 18 | 5.37 |
| 20. What is your marital status? |  |  |  |  |  |
|  | (1) Single | 84 | 39 | 123 | 36.72 |
|  | (2) Married | 158 | 49 | 207 | 61.79 |
|  | (3) No response | 3 | 2 | 5 | 1.49 |
| 21. How many children do you have? |  |  |  |  |  |
|  | (1) None | 80 | 36 | 116 | 34.63 |
|  | (2) 1 | 37 | 22 | 59 | 17.61 |
|  | (3) 2 | 56 | 14 | 70 | 20.90 |
|  | (4) 3 | 27 | 4 | 31 | 9.25 |
|  | (5) 4 or more | 15 | - | 15 | 4.48 |
|  | (6) No response | 30 | 14 | 44 | 13.13 |
| 22. How old are you? |  |  |  |  |  |
|  | (1) 24 years or younger | 2 | 5 | 7 | 2.09 |
|  | (2) 25-29 | 49 | 34 | 83 | 24.78 |
|  | (3) 30-34 | 68 | 31 | 99 | 29.55 |
|  | (4) $35-39$ | 59 | 4 | 63 | 18.81 |
|  | (5) 40-44 | 34 | 6 | 40 | 11.94 |
|  | (6) 45-49 | 23 | 1 | 24 | 7.16 |
|  | (7) 50-54 | 7 | 4 | 11 | 3.28 |
|  | (8) 55 or older | 3 | - | 3 | . 90 |
|  | (9) No response | - | 5 | 5 | 1.49 |

Table 1 (Continued)

| Demographic | $\frac{\mathrm{f}}{\mathrm{~N}=245}$ | $\frac{\mathrm{f}}{\mathrm{N}=90}$ | $\frac{\mathrm{f}}{\mathrm{~N}=335}$ | $\frac{\text { Percentage }}{N=335}$ |
| :---: | :---: | :---: | :---: | :---: |
| 23. What is your sex? |  |  |  |  |
| (1) Male | 122 | 46 | 168 | 50.15 |
| (2) Female | 122 | 44 | 166 | 49.55 |

## Preliminary Arrangement of the Data

From the preliminary analysis of responses by frequency counts, according to choices within each item, as illustrated in Table 1, it was found necessary to rearrange the data to meet the assumption of the analysis of variance testing statistic. To provide the required homogeneity of variance; subgroups with less than 20 counts were regrouped with the next subgroups, subgroups that had less than 20 counts were regrouped with the next subgroups, subgroups that had less than 20 counts and had distinct properties that could not be regrouped with others were eliminated from the related hypothesis testings.

## Results of Testing Hypothesis Number One

The null form of the first hypothesis was stated and tested as follows:
$\mathrm{Ho}_{1}$ There are no statistically significant differences in levels of dogmatism of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to each of 23 demographic items.

This hypothesis was tested by comparing the means of the Dogmatism scores of university professors grouped according to their responses to each of the 23 items. This was accomplished through the use of a one-way analysis of variance. The summary results of these calculations appear as the F ratio in Table 22 (Appendix C). From a total of 23 sub-hypotheses tested two were found to have significant differences at the level of .05 and beyond. Results are presented as follows:

1. The $E$ ratio in Table 2 indicates that there was $\equiv$ statistically
significant difference in the Dogmatism scores of university professors divided into two groups according to major field ( $F=4.983$; $\mathrm{df}=1 / 319$; p <.05). Frequency counts, means and standard deviations concerning the Doguatism scores of the two university professor groups appear in Table 26 (Appendix D). The group having major fields of last degrees in Social Sciences (Anthropology, Archeology, Political Science, Economics, and Sociology) had a lower mean Dogmatism score (156.76) than the group having major fields of last degrees in non-Social Sciences (166.11).
2. The E ratio in Table 3 indicates that there was a statistically significant difference in the Dogmatism scores of university professors divided into two groups according to sex ( $F=8.643$; $\mathrm{df}=1 / 332 ; \mathrm{p}<.01$ ). Frequency counts, means, and standard deviations concerning the Dogmatism scores of the two university professor groups appear in Table 27 (Appendix D). The male group had a higher mean Dogmatism score (168.57) than the female group (159.56).
3. There was no statistically significant differences in the Dogmatism scores of university professors grouped according to the other 21 demographic items namely, rank and appointment, nature of work and work load, institution, education, years of experience, teaching vs. research orientations, income, marital status and number of children, and age.

The first null hypothesis was rejected and it was concluded that university professors' dogmatism differed by major field of last degree and sex.

Table 2

One-Way Analysis of Variance: Differences in the Dogmatism Scores of University Professors Grouped According to Major Field

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | :---: | :---: | ---: | :---: | :---: |
| 8 |  |  |  |  |  |
|  | Between | 1 | 3983.85 | 3983.85 | $4.983 *$ |
|  | Within | 319 | 255042.03 | 799.51 |  |
|  | Total | 320 | 259025.88 |  |  |

Note. *p < . 05

Table 3
One-Way Analysis of Variance: Differences
in the Dogmatism Sccres of University Professors Grouped According to Sex

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23 |  |  |  |  |  |
|  | Between | 1 | 6771.41 | 6771.41 | $8.646 \% *$ |
|  | Within | 332 | 260004.91 | 783.15 |  |
|  | Total | 333 | 266776.31 |  |  |

Note. ${ }^{* *}$ p < . 01

## Results of Testing Hypothesis Number Two

The null form of the second hypothesis was stated and tested as

## follows:

$\mathrm{Ho}_{2}$ There is no statistically significant difference in levels of dogmatism of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to levels of the perceived social responsibilities.

This hypothesis was tested by comparing the means of the Dogmatism scores of university professors divided into two groups at the total mean of the Social Responsibility Scale (20.41). The testing was accomplished through the use of a one-way analysis of variance. The summary results of these calculations appear as the F ratio in Table 4.

Results of testing the second null hypothesis indicate that the computed F ratio was significant ( $F=6.826$; $\mathrm{df}=1 / 333 ; \mathrm{p}<.01$ ). The results allowed the researcher to reject the null hypothesis and it was concluded that there was a significance difference in dogmatism of university professcrs grouped according to the perceived social responsibilities. Frequency counts, means, and standard deviations concerning the Dogmatism scores of the two university professor groups appear in Table 28 (Appendix D). The low mean SRS score group had a lower mean Dogmatism score (160.76) than the high mean SRS score group (168.90).

## Results of Testing Hypothesis Number Three

The null form of the third hypothesis was stated and tested as

## follows:

$\mathrm{Ho}_{3}$ There are no statistically significant differences in levels of dogmatism of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to the opinions upon higher education issues.

Table 4
One-Way Analysis of Variance: Differences
in the Dogmatism-Scores of University Professors
Grouped According to the SRS Scores

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :--- | ---: | ---: | ---: | ---: | :--- |
| SRS | Petween | 1 | 1701.98 | 1701.98 | $2.068^{*}$ |
|  | Within | 333 | 274007.13 | 822.84 |  |
|  | Total | 334 | 275709.06 |  |  |

Note. *p < . 05

This hypothesis was tested by comparing the means of the Dogmatism scores of university professors grouped according to their responses to each of the 8 items concerning the opinions upon higher education issues. This was accomplished through the use of a one-way analysis of variance. The summary results of these calculations appear as the F ratio in Table 23 (Appendix C). From a total of 8 sub-hypotheses tested, three were found to have the significant differences at the levels of .01 or beyond. Results are presented as follows:

1. The E ratio in Table 5 indicates that there was a statistically significant difference in the Dogmatism scores of university professors divided into two groups according to opinions toward banning political activities on a university campus ( $F=11.199$; $\mathrm{df}=1 / 330 ; \mathrm{p}<.01$ ). Frequency counts, means, and standard deviations concerning the Dogmatism scores of the two university professor groups appear in Table 29 (Appendix D). The group agreeing on banning the political activities on a university
campus had a higher mean Dogmatism score (170.27) than the disagreeing group (159.87).
2. The F ratio in Table 6 indicates that there was a statistically significant difference in the Dogmatism scores of university professors divided into three groups according to opinions toward political and social effects during October 14, 1973 to October 6, 1976 on their work ( $F=$ 4.758; df $=2 / 326 ; \mathrm{p}<.01$ ). Frequency counts, means, and standard deviations concerning the Dogmatism scores of the three university professor groups appear in Table 30 (Appendix D). Since there were more than two groups in the testing of significant difference, Scheffe's test was computed to locate the area of difference. The $\underline{S}$ test revealed that the group indicating the situation had no effect on their work had a significantly lower mean Dogmatism score (151.27) than the group indicating the situation had a harmful effect (173.76).
3. The E ratio in Table 7 indicates that there was a statistically significant difference in the Dogmatism scores of university professors divided into three groups according to opinions toward political and social effects after October 6, 1976 to October 20, 1977 on their work ( $F=11.008 ; \mathrm{df}=2 / 327 ; \mathrm{p}<.001$ ). Frequency counts, means, and standard deviations concerning the Dogmatism scores of the three university professor groups appear in Table 31 (Appendix D). The $\underline{S}$ Test was computed to locate the area of significant difference. It revealed that the group Indicating the situation had a favorable effect on their work had a significantly higher mean Dogmatism score (181.44) than the group indicating "no effect" (161.34) and the group indicating harmful (160.86).

## Table 5

One-Way Analysis of Variance; Differences
in the Dogmatism Scores of University Professors Grouped According to Attitudes toward Banning Students' Political Activities

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 76 | Between | 1 | 8572.26 | 8572.26 | $11.199 * * *$ |
|  | Within | 330 | 252593.38 | 765.43 |  |

Note. ***p < . 001

Table 6
One-Way Analysis of Variance: Differences
in the Dogmatism Scores of University Professors Grouped According to the Political Effecta

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 78 | Between | 2 | 7480.79 | 3740.39 | $4.758 * *$ |
|  | Within | 326 | 256264.57 | 786.09 |  |
|  | Total | 328 | 263745.31 |  |  |
|  |  |  |  |  |  |

Note. $\quad * *_{p}$ < . 01
$\mathrm{a}_{\text {From October 14, } 1973 \text { to October. } 6,1976}$

Table 7
One-Way Analysis of Variance: Differences
in the Dogmatism Scores of University Professors Grouped According to the Political Effect ${ }^{\text {a }}$

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 79 | Between | 2 | 16710.88 | 8355.44 | $11.008 * * *$ |
|  | Within | 327 | 248209.63 |  |  |
|  | Total | 329 | 264920.50 |  |  |

Note. ***p < . 001
${ }^{\text {a }}$ After October 6, 1976 to October 20, 1977
4. There were no statistically significant differences in the Dogmatism scores of university professors grouped according to other opinions toward higher education issues: namely, the institutions' concern for students' personal values; faculty-student relation; institutional engagement in solving social problems; students' practical training in the community; and academic freedom of faculty.

The null hypothesis was rejected. It was concluded that university professors' dogmatism differed on three items of opinions toward higher education issues: namely, banning students' political activities on a university campus; political and social effects during October 14, 1973 to October 6, 1976 on their work; and political and social effects after October 6, 1976 to October 20, 1977 on their work.

Results of Testings Hypothesis Number Four

The null form of the fourth hypothesis was stated and tested as follows:
$\mathrm{Ho}_{4}$ There are no statistically significant differences in levels of job satisfaction of university professors; in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to each of 23 demographic items.

This hypothesis was tested by comparing the means of the JDI scores of university professors grouped according to their responses to each of the 23 items. This was accomplished through the use of a oneway analysis of variance. The summary results of these calculations appear as the $E$ ratio in Table 24. From a total of 23 sub-hypotheses tested seven were found to have the significant differences at the level of .05 and beyond. Results are presented as follows:

1. The $\mathcal{F}$ ratio in Table 8 indicates that there was a statistically significant difference in the JDI scores of university professors divided into five groups according to numbers of students enrolled in their courses during the second semester of 1977 academic year $(F=3.717 ; \mathrm{df}=$ 4/310; $p<.01$ ). Frequency counts, means, and standard deviations concerning the JDI scores of the 5 university professor groups appear in Table 32 (Appendix D). Since there were more than two groups in the testing of significant difference, the $S$ test was computed to locate the area of difference. The test revealed that the group having less than 25 students enrolled in their courses had a significantly lower mean JDI score ( 150.00 ) than the group having 250 and more (167.16). No other significant differences were indicated.
2. The $E$ ratio in Table 9 indicates that there was a statistically significant difference in the JDI scores of university professors divided

Table 8
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to Numbers of Students Enrolled in their Courses

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | :---: | ---: | ---: | ---: |
| 5 | Between | 4 | 6776.17 | 1694.04 | $3.717 * *$ |
|  | Within | 310 | 141291.82 | 455.78 |  |
|  | Total | 314 | 148067.94 |  |  |
|  |  |  |  |  |  |

Note. $* *_{p}$ 人 . 01

Table 9
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to Institution

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 6 | Between | 6 | 11515.11 | 1919.19 | $4.292 * * *$ |
|  | Within | 326 | 145775.50 | 447.16 |  |
|  | Total | 332 | 157290.56 |  |  |

Note. ***p < . 001
into seven groups according to institutions in which they were employed ( $\mathrm{F}=4.292 ; \mathrm{df}=6 / 327 ; \mathrm{p}<.001$ ). Frequency counts, means, and standard deviations concerning the JDI scores of the seven university professor groups appear in Table 33 (Appendix D). The $\underline{S}$ test was computed to locate the area of significant difference, and its results indicated that the university professor group employed at Thammasat University had a lower mean JDI score (150.24) than the university professors groups employed at Ramkamineng University (170.00) and the group employed at the other three institutions combined (169.17) namely Sri-Nakarin University, NIDA, and MIT.
3. The F ratio in Table 10 indicates that there was a statistically significant difference in the JDI scores of university professors divided into two groups according to major field of last degree ( $\mathrm{F}=8.145$; $\mathrm{df}=$ 1/319; p <.01). Frequency counts, means, and standard deviations concerning the JDI scores of the two university professor groups appear in Table 34 (Appendix D). The group of Social Sciences majors, composed of Archeology, Anthropology, Economics, Political Science, Govern:nent, and Sociology, had a higher mean JDI (168.65) than the non-Social Sciences group (159.44).
4. The E ratio in Table 11 indicates that there was a statistically significant difference in the JDI scores of university professors divided into five groups according to the time devoted to administration ( $\mathrm{F}=$ 4.427; df = 4/328; p (.01). Frequency counts, means, and standard deviations conceraing the SEI scores of the five university professor groups appear in Table 35 (Appendix D). The $\underline{S}$ test indicated that the group having no proportion of their time devoted to administration had a

Table 10
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to Major Field

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 8 |  |  |  |  |  |
|  | Between | 1 | 3866.59 | 3866.59 | $8.145 \% *$ |
|  | Within | 319 | 151443.04 | 474.74 |  |
|  | Total | 320 | 155309.56 |  |  |

Note. $* *$ p < . 01

Table 11
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped
According to Time Devoted to Administration

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 14 |  |  |  |  |  |
|  | Between | 4 | 8033.02 | 2008.26 | $4.427 * *$ |
|  | Within | 328 | 148810.01 | 453.69 |  |
|  | Total | 332 | 156843.00 |  |  |
|  |  |  |  |  |  |

Note. $* * p<.01$
significantly lower mean JDI score (152.10) than the group devoting $1-10$ percent (162.73) and the group devoting 41 percent or more of their time (169.14).
5. The F ratio in Table 12 indicates that there was a statistically significant difference in the JDI scores of university professors divided . into seven groups according to income earned at the institutions ( $F=$ 2.575; df $=6 / 326 ; p<.05)$. Frequency counts, means, and standard deviations concerning the $\underline{\underline{\underline{I}} \mathrm{I}}$ scores of the seven university professor group appear in Table 36 (Appendix D). However, the $\underline{S}$ test failed to locate the area of significant difference.
6. The F ratio in Table 13 indicates that there was a statistically significant difference in the JDI scores of university professors divided' into three groups according to income earned outside the institutions ( $F=4.606$; $\mathrm{df}=2 / 314 ; \mathrm{p}<.01$ ). Frequency counts, means, and standard deviations concerning the JDI scores of the three university professor groups appear in Table 37 (Appendix D). The $\underline{S}$ test indicated that the group earning less than 3,000 bahts in a year outside the institutions of employment had a significantly lower mean JDI score (157.47) than the group earning 3,000 to 10,000 bahts (164.03) and the group earning 10,001 and more (165.56).
7. The F ratio in Table 14 indicates that there was a statistically significant difference in the JDI scores of university professors divided into two groups according to marital status ( $\mathrm{F}=4.761$; $\mathrm{df}=1 / 328$; p <.05). Frequency counts, means; and standard deviations concerning the two university professor group appear in Table 38 (Appendix D). The single group had a lower mean JDI score (157.64) than the married group (163.01).

Table 12
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to Income Earned at the Institutions

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 18 | Between | 6 | 7166.09 1194.35 | $2.575 *$ |  |
|  | Within |  |  |  |  |
| Total |  |  |  |  |  |

Note. $*_{p}<.05$

Table 13
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to Income Earned outside
the Institutions

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 19 | Between | 2 | 4383.68 | 2190.84 | $4.606 \%$ |
|  | Within | 314 | 149431.37 | 475.90 |  |
|  | Total | 316 | 153815.00 |  |  |
|  |  |  |  |  |  |

Note. $* *$ p $<.01$

Table 14

One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to Marital Status

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 20 | Between | 1 |  |  |  |
|  | Within | 328 | 153408.75 | 467.71 | $4.761 *$ |
|  | Total | 329 | 155635.25 |  |  |

Note. *p < . 05
8. There were no statistically significant differences in the JDI scores of university professors grouped according to other items of the demographics namely rank and appointment, nature of work, education, years of experience, teaching vs. research orientations, number of children, age, and sex.

The null hypothesis was rejected. It was concluded that university professors' job satisfaction differed by number of students enrolled in their courses, institutions in which they were employed, major field of last degree, proportion of time devoted to administration, income earned at the institutions, income earned outside the institutions, and marital status.

Results of Testings Hypothesis Number Five
The null form of the fifth hypothesis was stated and tested as follows:

Table 15

One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped According to the SRS Scores

| Item | Source of Variation | D.F. | Sum of Squares | Mean Squares | $F$ Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SRS | Between | 1 | 8761.07 | 8761.07 | 19.476*** |
|  | Within | 333 | 149795.95 | 449.84 |  |
|  | Total | 334 | 279800.19 |  |  |

Note. $* * *$ p $<.001$

Ho There are no statistically significant differences in levels of
5 job satisfaction of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to the perceived social responsibilities.

This hypothesis was tested by comparing the means of the JDI scores of university professors divided into two groups at. the total mean SRS score of 20.41. The testing was accomplished through the use of a one-way analysis of variance. The summary results of these calculations appear as the F ratio in Table 15.

Results of testing the fifth null hypothesis indicated that the computed $E$ ratio was significant $(F=19.476 ; \mathrm{df}=1 / 333 ; \mathrm{p}<.001$ ). The null hypothesis was rejected. It was concluded that university professors' job satisfaction differed by levels of perceived social responsibilities. Frequency counts, means, and standard deviations concerning the JDI scores of the two university professor groups appear in Table 39 (Appendix D). The university group having low SRS scores had a higher mean JDI (165.09) than the group having high SRS scores (154.68).

## Results of Testings Hypothesis Number Six

The null form of the sixth hypothesis was stated and tested as follows:
$\mathrm{Ho}_{6}$ There are no statistically significant differences in levels of job satisfaction of university professors, in Bangkok-Thonburi Metropolitan City, Thailand, grouped according to the opinions upon higher education issues.

This hypothesis was tested by comparing the mean JDI scores of university professors grouped according to their responses to each of the 8 items concerning the opinions upon higher education issues. This was accomplished through the use of a one-way analysis of variance. The sumnary results of these calculations appear as the F ratio in Table 24. From a total of 8 sub-hypotheses tested, two were found to have significant differences at the levels .05 and beyond. Results are presented as follows:

1. The E ratio in Table 16 indicates that there was a statistically significant difference in the JDI scores of university professors divided into six groups according to opinions toward banning political activities on a university campus ( $\mathrm{F}=2.697$; $\mathrm{df}=5 / 326$; $\mathrm{p}<.05$ ). Frequency counts, means, and standard deviations concerning the JDI scores of the six university professor groups appear in Table 40 (Appendix D). However, the $S$ test failed to indicate the area of significant difference.
2. The F ratio in Table 17 indicates that there was a statistically significant difference in the JDI scores of university professors divided into three groups according to opinions toward the social and political effects during October 14, 1973 to October 6, 1977 on their work ( $F=$ 7.464; df = 2/326; p < .001). Frequency counts, means, and standard deviations concerning the JDI scores of the three university professor

Table 16
One-Way Analysis of Variance: Differences in the JDI Scores of University Professors Grouped According to Attitudes toward Banning

Students' Political Activities

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 76 | Between | 5 | 6281.06 | 1256.21 | $2.697 *$ |
|  | Within | 326 | 151817.26 | 465.70 |  |
|  | Total | 331 | 158098.31 |  |  |
|  |  |  |  |  |  |

Note. *p < . 05

Table 17
One-Way Analysis of Variance: Differences
in the JDI Scores of University Professors Grouped
According to the Political Effect ${ }^{\text {a }}$

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 78 | Between | 2 | 6780.56 | 3390.28 | $7.464 * * *$ |
|  | Within | 326 | 148074.19 | 454.22 |  |
|  | Total | 328 | 154854.69 |  |  |

Note. ***p < . 001
$a_{\text {After October 6, }} 1976$ to October 20, 1977
groups appear in Table 41 (Appendix D). The $\underline{S}$ test indicated that the group perceiving the effects as harmful had a significantly lower mean JDI score (150.45) than the group perceiving "favorable" (163.52).
3. There were no statistically significant differences in the JDI scores of university professors grouped according to other items of the opinions toward higher education issues; namely, institutions' concern for students' personal values; faculty-student relation; students' practical training in the community; institutional engagement in solving social problems; academic freedom; and political and social effects after October 6, 1976 to October 20, 1977.

The null hypothesis was rejected. It was concluded that university professors' job satisfaction differed in 2 areas of the opinions upon higher education issues: banning students' political activities on a university campus; and the political and social effects during October 14, 1973 to October 6, 1976.

## Results of Testing Null Hypothesis Number Seven

The null form of the seventh hypothesis was stated and tested as follows:
$\mathrm{Ho}_{7}$ There is no interaction between the major field of study and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.

The seventh null hypothesis was tested by comparing the JDI scores of individuals within each of the six subgroups. This was accomplished through the use of a two-way analysis of variance, and appears as the F ratio of the two-way interactions Table 18.

The results presented in Table 18 indicate that there was not a

Table 18
Two-Way Analysis of Variance: Differences in the JDI Scores of University Professors Grouped According to the Dogmatism Scores and Major Field

| Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :--- | ---: | ---: | ---: | :--- |
| Main Effects | 3 | 7252.68 | 2417.56 | $5.251 * * *$ |
| $\quad$ Dogmatism | 2 | 3307.29 | 1653.64 | $3.592 *$ |
| Demographic 8 | 1 | 3302.28 | 3302.28 | 7.172 |
| Two-Way Interactions | 2 | 423.67 | 211.83 | .632 |
| Residual | 327 | 150556.31 | 460.42 |  |
| Total |  |  | 158232.69 | 460.42 |

Note. ${ }^{*}$ p $<.05 ; * *$ p $<.01 ; * * * p<.001$
significant interaction between the two independent variables of the major field of last degree and Dogmatism scores upon the jDI scores ( $F=0.632$; $\mathrm{df}=2 / 332 ; \mathrm{p}\rangle .05$ ). These results would not allow the researcher to reject the seventh null hypothesis.

However, further data from the two-way analysis of variance indicate interesting findings. The E ratio of the main effects of the Dogmatism scores at 3.592 ( $p<.05$ ) shows that, when the major field variable was controlled, there was a significant difference in the JDI score of university professors grouped according to their levels of dogmatism. Frequency counts, means, and standard deviations of the JDI scores six university teacher groups appear in Table 42 (Appendix D).

Table 19

Two-Way Analysis of Variance; Differences in the JDI Scores of University Professors Grouped

According to the Dogmatism Scores and the SK̃S Scores

| Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :--- | ---: | ---: | ---: | :---: |
| Main Effects | 3 | 11193.15 | 3731.05 | $8.334 * * *$ |
| $\quad$ Dogmatism | 2 | 2431.60 | 1215.80 | 2.716 |
| SRS | 1 | 7306.94 | 7306.94 | $16.322 * * *$ |
| Two-Way Interactions | 2 | 77.86 | 38.93 | .087 |
| Residual | 329 | 147281.63 | 447.66 |  |
| Total |  |  |  |  |

Note. *p < . 05; **p < . 01 ; ***p < . 001

## Results of Testing Null Hypothesis Number Eight

The null form of the eighth hypothesis was stated and tested as follows:
$\mathrm{Ho}_{8}$ There is no interaction between se1f-perceived social responsibilities and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.

The eighth null hypothesis was tested by comparing the JDI scores of individuals within each of the six subgroups. This was accomplished through the use of a two-way analysis of variance, and appears as the $E$ ratio of the two-way interactions in Table 19.

The results presented in Table 19 indicate that there was not a significant interaction between the two independent variables, the SRS scores and Dogmatism scores, upon the JDI scores ( $\mathrm{F}=0.087$; $\mathrm{df}=2 / 324$; p $\rangle$.05). These results would not allow the researcher to reject the
eighth null hypothesis.
Further data from Table 19 indicate interesting findings. Unlike related finding from the testing of the seventh hypothesis, there was no significant difference in the JDI scores of university professors grouped according to their level of dogmatism when the SRS score variable was controlled ( $\mathrm{F}=2.716$; $\mathrm{df}=2 / 329 ; \mathrm{p}>.05$ ). Frequency counts, means, and standard deviations concerning the JDI scores of the six university professor groups appear in Table 43 (Appendix D).

## Results of Testing Null Hypothesis Number Nine

The null form of the ninth hypothesis was stated and tested as follows:
$\mathrm{Ho}_{9}$ There is no interaction between the perceived political effects and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.

Because there were two different political situations as mentioned earlier in the related literature, the null hypothesis had to be separately restated and tested as follows:
${ }^{\mathrm{Ho}}$ 9. $\mathrm{I}_{\text {dure }}$ The in no interaction between the perceived political effects satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.

This sub-hypothesis was tested by comparing the IDI scores of individuals within each of the nine subgroups. This was accomplished through the use of a two-way analysis of variance and appears as the $\underline{F}$ ratio of the two-way interactions in Table 20 . The results presented in Table 20 indicate that there was not a significant interaction between the two independent variables of the perceived political effects during October 14, 1973 to October 6, 1976 and Dogmatism scores upon the JDI

Two-Way Analysis of Variance: Differences in the JDI Scores of University Professors Grouped

According to the Dogmatism Scores and the Political Effects ${ }^{\text {a }}$

| Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :--- | ---: | ---: | ---: | :--- |
|  |  |  |  |  |
| Main Effects | 4 | 9965.93 | 2491.48 | $5.586 * * *$ |
| Dogmatism | 2 | 3184.98 | 1592.49 | $3.571^{*}$ |
| Political Effects | 2 | 5565.20 | 2782.60 | $6.239 * *$ |
| Two-Way Interactions | 4 | 2166.49 | 541.62 | 1.214 |
| Residual | 320 | 142718.50 | 446.00 |  |
|  |  |  |  |  |
| Total | 328 | 154850.94 | 472.11 |  |

Note. *p < . 05; **p < . 01 ; ***p < . 001
${ }^{a_{T}}$ The political and social effects during October 14,1973 to October 6, 1976 on their work
scores ( $F=1.214$; $\mathrm{df}=4 / 328 ; \mathrm{p}>.05$ ). These results would not allow the researcher to reject the first part of the ninth null hypothesis.

Further data from Table 20 indicate interesting findings. There was a significant difference in the JDI scores of university professors grouped according to their levels of dogmatism when the variable of the opinions toward political effects on their work during October 14, 1973 to October 6, 1976 was contro1led ( $\mathrm{F}=3.571$; $\mathrm{df}=2 / 320$; p <.05).

Frequency counts, means, and standard deviations concerning the JDI scores of the nine university professor groups appear in Table 44 (Appendix D).
$\mathrm{Ho}_{9.2}$ There is no interaction between the perceived political effects after October 6, 1976 to October 20, 1977 and dogmatism upon job satisfaction of university professors in Bangkok-Thonburi Metropolitan City, Thailand.

Table 21

Two-Way Analysis of Variance: Differences in the JDI Scores of University Professors Grouped According to the Dogmatism Scores and the Political Effects ${ }^{\text {a }}$

| Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :--- | ---: | ---: | ---: | :---: |
|  |  |  |  |  |
| Main Effects | 4 | 5657.22 | 1414.31 | $3.026 *$ |
| $\quad$ Dogmatism | 2 | 4321.42 | 2160.71 | $4.623 * *$ |
| Political Effects | 2 | 1560.06 | 780.03 | 1.669 |
| Two-Way Interactions | 4 | 1746.70 | 436.68 | .934 |
| Residual | 321 | 150022.50 | 467.36 |  |
| Total | 329 | 157426.44 | 478.50 |  |

Note. ${ }^{*} \mathrm{p}<.05 ; * * \mathrm{p}<.01$
${ }^{\text {a }}$ The political and social effects after October 6, 1976 to October 20, 1977 on their work

This sub-hypothesis was tested by comparing the JDI scores of individuals within each of the nine subgroups. This was accomplished through the use of a two-way analysis of variance, and appears as the $E$ ratio of the two-way interactions in Table 21.

The results presented in Table 21 indicate that there was not a significant interaction between the two independent variables, the perceived political effects after October 6, 1976 to October 20, 1977 and Dogmatism scores, upon the JDI scores ( $F=0.934 ; \mathrm{df}=4 / 329 ; \mathrm{p}>.05$ ). These results would not allow the researcher to reject the second part of the ninth null hypothesis.

Further data from Table 21 indicate interesting findings. There
was a significant difference in the JDI scores of university professors grouped according to their levels of dogmatism when the variable of opinions toward political effect upon their work after October 6, 1976 to October 20, 1977 was controlled ( $F=4.623$; $\mathrm{df}=2 / 321$; $\mathrm{p}<.01$ ). Frequency counts, means, and standard deviations concerning the JDI scores of the nine university teacher groups appear in Table 45 (Appendix D).

## CHAPTER V

SUMMARY, DISCUSSION, AND SUGGESTIONS
FOR FURTHER STUDY


#### Abstract

Summary The problem of the study was to determine what the interactions of dogmatism and selected variables (such as major field, self-perceived social responsibilities, and perceived political effects) upon job satisfaction of university professors in Thailand are. More specifically, the researcher investigated (1) whether there are different levels of dogmatism of university professors in Thailand grouped according to personal characteristics, levels of perceived social responsibilities, and attitudes toward higher education issues, (2) whether there are different levels of job satisfaction of university professors in Thailand grouped according to personal characteristics, levels of perceived social responsibilities, and attitudes toward higher education issues, and (3) whether there are interactions of dogmatisin and selected variables upon job satisfaction of university professors in Thailand.

The importance of the study derived from Getzels and Guba's Social System model used in the theoretical framework. Because of the role expectations of university professors are for innovation, criticism,


non-conformism, and tolerance toward ambiguity, individuals with personalities congruent to such expectations are likely to be satisfied in their professional job. The related literature suggested that, in this case, low dogmatics are expected to have higher job satisfaction than high dogmatics. However, because of the non-experimental nature of the study, the relationship between dogmatism and job satisfaction might be clouded by interactional effects of uncontrolled variables.

The Dogmatism Scale, Social Responsibility Scale, and the Job Description Index were included in the questionnaire package of 151 items. The total of 600 questionnaires were randomly administered to university professors in Bangkok-Thonburi Metropolitan City, Thailand, 335 or 55.8 were returned. Nine null hypotheses were tested and the results were as follows:

Hypothesis one: There were significant differences in dogmatism of university professors grouped according to two demographic variables namely major field of study and sex: (1) The university professors having their last degrees in Social Sciences (Antropology, Archeology, Political Sciences, Economics, and Sociology) were less dogmatic than university professors having their last degrees in other fields. Female university professors were found less dogmatic than male university professors. There were no significant differences in dogmatism of university professors grouped according to other demographic variables such as rank and appointment, nature of work and work load, institutional characteristics, education, years of experience, teaching vs. research orientations, income, marital status and number of children, and age.

Hypothesis two: There was a significant difference in dogmatism of university professors grouped according to the perceived social responsibilities. University professors perceiving themselves as having low social responsibilities were less dogmatic than those perceiving themselves as having high social responsibilities.

Hypothesis three: There were significant differences in dogmatism of university professors grouped according to opinions toward higher education issues in three areas: (1) University professors supporting banning the students' political activities on a university campus were more dogmatic than the university professors opposing such banning. (2) University professors reporting the political situation during October 14, 1973 to October 6, 1976 had no effect on their work were less dogmatic than the group reporting the situation was "harmful." (3) Conversely, university professor reporting the political situation after October 6, 1976 to October 20, 1977 had no effect or harmful to their work were less dogmatic than those reporting the situation was favorable. There were no differences in dogmatism of university professors grouped according to opinions toward other issues in higher education such as the institutions' concern for personal values, faculty-student relation, institutional engagement in solving social problem, students practical training in the community, and academic freedom.

Hypothesis four: There were significant differences in dogmatism grouped according to seven demographic variables namely students' enrollment in their courses, institution, major field of last degree, time devoted to administration, income earned within and outside the institutions, and marital status: (1) University professors with less than 25 students
enrolled in their courses were less satisfied in their jobs than those having 250 and more. (2) University professors employed at Thammasat University were less satisfied in their job than those employed at Ramkamhaeng University and other three university combined (MIT, SriNakarin University, and NIDA). (3) University professors having last degrees in Social Sciences were more satisfied in their jobs than those having last degrees in non-Social Sciences fields. (4) üniversity professors devoting no time to administrative tasks were less satisfied in their jobs than those devoting 1 to 10 percent and those devoting
 of university professors grouped according to other demographic variables namely, rank and appointment, nature of work, education, years of experience, teaching vs. research orientations, number of children, age, and sex.

Hypothesis five: There was a significant difference in job satisfaction of university professors grouped according to the perceived social responsibilities. Those perceiving themselves as having low social responsibilities were more satisfied in their job than those perceiving themselves as having high social responsibilities.
enrolled in their courses were less satisfied in their jobs than those having 250 and more. (2) University professors employed at Thamasat University were less satisfied in their job than those employed at Ramkamhaeng University and other three university combined (MIT, SriNakarin University, and NIDA). (3) University professors having last degrees in Social Sciences were more satisfied in their jobs than those having last degrees in non-Social Sciences fields. (4) University professors devoting no time to administrative tasks were less satisfied in their jobs than those devoting 1 to 10 percent and those devoting 41 percent or more of their time to administration. (5) Though the analysis of variance indicated the difference in university professors' job satisfaction, the $\underline{S}$ test failed to located the area of difference according to income within the institutions. (6) University professors earning less than 3,000 bahts outside the institutions were less satisfied in their jobs than those earning 3,000 bahts and more. (7) The single university professors were less satisfied in their jobs than those who were married. There were no significant differences in job satisfaction of university professors grouped according to other demographic variables namely, rank and appointment, nature of work, education, years of experience, teaching vs. research orientations, number of children, age, and sex.

Hypothesis five: There was a significant difference in job satisfaction of university professors grouped according to the perceived social responsibilities. Those perceiving themselves as having low social responsibilities were more satisfied in their job than those perceiving themselves as having high social responsibilities.

Hypothesis six: There were significant differences in job satisfaction of university professors grouped according to two variables concerning opinions toward higher education issues. (1) Though the analysis of variance indicated that there was a difference, the $\underline{S}$ test could not located the area of such difference in job satisfaction of university professors grouped according to their opinion toward banning the political activities on a university campus. (2) University professors perceiving the political situation during October 14,1973 to October 6, 1976 as having a harmful effect on their work were less satisfied in their jobs than those perceiving the situation as having no effect or favorable. There were no significant differences in job satisfaction of university professors grouped according to other variables of opinions toward higher education issues such as students' personal values, faculty-student relation, institutional engagement in solving social problems, students' practical training in the community, academic freedom, and the effect of the political situation after Ootober 6, 1976 to October 20,1977 on their work.

Hypothesis seven: There was no significant interaction between major field and dogmatism upon job satisfaction of university professors.

Hypothesis eight: There was no significant interaction between the self-perceived social responsibilities and dogmatism upon job satisfaction of university professors.

Hypothesis nine (part one): There was no significant interaction between the perceived political effect during October 14; 1973 to October 6, 1976 and dogmatism upon job satisfaction of university professors.

Hypothesis nine (part two): There was no significant interaction of the perceived political effect after October 6, 1976 to October 20, 1977 and dogmatism upon job satisfaction of university professors.

Related findings: Further two-way analysis of variance testings for the seventh, eighth, and ninth hypotheses revealed significant differences in job satisfaction of university professors grouped according to dogmatism in three out of four testings. Regardless of selected variables, low dogmatic university professors were more satisfied in their jobs than highly dogmatic university professors.

## Discussion

The social system model used as the theoretical framework of the study led to the logical hypothesis that university professors, if expected to be satisfied in their jobs in the academic community, have to have beliefs, attitudes, or values congruent to the role expectations of university professors. As mentioned by Ladd and Lipset (1975), university professors may be defined as having three subroles: namely teacher, scholar, and researcher. These subroles have put special demands upon university professors for rigorous scrutiny, criticism, and tolerance toward ambiguity. Related research concerning dogmatism indicated that low dogmatics tended to have personalities more congruent to such demands of university professors than high dogmatics. These studies suggested that individuals being low in dogmatism (open-minded) would have less conflict in the role of university professor and were expected to be more satisfied in their jobs. However, because of the non-experimental nature of the study where extraneous variables were not controlled, the
relationship between dogmatism and job satisfaction of university professors might be clouded by effects of uncontrolled variables. From reviewing the literature concerning previous related research, the researcher suspected that political effect of the "experimental democracy" and "coup d'etat" might have impact upon such relationships. Findings from testing the first six hypotheses indicated that the political turbulence had an effect upon university professors. The evidence is presented as follows: (1) Thamasat University as a place of employment had shown an effect upon university professors' job satisfaction. Its ranking as the lowest of all nine institutions in term of university professors' job satisfaction indicated that the exile of the student-and-faculty-elected rector and the bloodshed incident during October 6, 1976 on the university campus might have been causal. (2) The "Student Revolution" era seemed to disturb high dogmatic university professors while the others did not feel the effect or saw it as favorable to their work. Conversely, high dogmatics tended to see the repressive period after October 6, 1976 to October 20, 1977 as favorable to their work while low dogmatics saw it as having no effect or harmful to their work. Though findings indicated university professors perceived themselves as being effected by the political situations there were still questions whether the situations had interactional effects upon the relationship between dogmatism and job satisfaction. Related 1iterature led the researcher to suspect that politically related variables such as major field of last degree, perceived social responsibilities, and political effects of the "experimental democracy" and "coup d'etat" might have an impact upon the relationship. Two-way analysis of variance was utilized
to evaluated the interactional effect between such selected variables and dogmatism upon job satisfaction. The results from testing Hypotheses Seven, Eight, and Nine indicated that there were no such interactional effects. Further data analyses as by-product of the statistical testings revealed information way analysis of variance testings, university professors' job satisfaction was found to differ by levels of dogmatism. Simply stated, low dogmatic university professors tended to be more satisfied in their work than the highly dogmatic university professors regardless of political or situational impacts. The findings substantially supported the assumption that open-mindedness or low dogmatism is an essence in the role expectations of university professors.

A question emerged from the finding: Why did the political situation after October 6, 1976 to October 20,1976 which turned the country to a repressive period, not cause the low dogmatic university professors to be less satisfied in their job than the highly dogmatic university professors? (Low dogmatics, more than high dogmatics, expressed the "repressive period" as harmful to their work.) Different aspects of answers are provided as follows: (1) During the short period of repression, there was little opportunity for the regime to intervene in the internal affairs of university administration. Only at Thammasat University where the rectorship was vacant, because the former rector went into exile, could the regime select their own replacement. However, after October 20, 1977 when the military government provided a more permissive atmosphere, the new rector was forced to resign by the pressure from instructors within the university. (2) The practice of tenure system in the Thai bureaucracy
provided university professors adequate protection against the external threat. Practically, all university professors will be granted tenureship after a probationary period of six to nine months. Further, university professors always enjoy a privilege over other governmental offocers. They are granted "automatic promotion" while other regular bureaucrats are requaied to pass an examination in order to be promoted from the bottom up. (3) After October 14, 1973 university professors had gained more power in decision making in both academic as well as administrative areas. Faculty senates and due process emerged during this anarchic period to provide needed protection for academic freedom. (4) The low dogmatic university professors, according to their SRS scores, were socially and politically alienated toward the existing tradition. They tended to care less what the political grocess was going to be, to feel unobligated to any social or political happenings, and should be characterized as observers rather than participants. (5) The $\underline{D}$ Scale, though it has a high correlation level with the $F$ Scale of Adorno (1950), was not designed to detect political ideologies. If the $E$ Scale were used instead of the D Scale, the outcome might have been different. (6) The population in this study did not include a number of faculty who went into exile or, who resigned to run for political offices during the "experimental democracy," or who resigned because of dissatisfaction toward the dictatorial regime. These people, according to their reasons for leaving institutions, should be among the more politically oriented group, and some of them might have been low dogmatic.

## Sugecstions for Further Study

To the researcher's knowledge, this study was the first in administering the Dogmatism Scale to any group of the Thai population. Though the $\underline{D}$ Scale was translated into Thai and pretested for linguistic accuracy, questions could still be raised concerning validity. The success of the Engilish version has been proven in psychological and social research in the United States and other English speaking countries. Its prospective contribution should be motivating to future Thai researchers to improve its Thai version. The test should be administered to various other groups. The D Scale could be strengthened by improving or eliminating the inconsistent items. The correlational matrix was recommended in locating the area of inconsistency.

Among the demographic variables used in this type of study, sociomeconomic background was important but could not be included in this study. However, it cannot be gathered by the use of a questionnaire due to its secrecy and embarrassment. Since interviews seemed to be a more effective technique for data gathering than the paper-and-pencil-type questionnaire, it is suggested that this method be used in further study applying socio-economic background as a research variable.

If there is no need to compare the degree of job satisfaction among personnel of various organizations, such as in business and industry, with university professors, then parts of the JDI should be selectively used For example, "work" showed a high internal correlation and can be nearly as effective as the total JDI and, at the same time, more convenient for respondents to answer. The JDI, though effective and easy to answer, was too general for administering specifically to academic personnel.

Additional questions could be constructed to elicit information concerning the work of academic personnel, namely instruction, research, and service to the society.

## REFERENCES

## REFERENCES

Adams, H. E., \& Vidulich, R. N. Dogmatism and belief consequence in paired-associate learning. Psychological Reports, 1962, 10, 9194.

Adorno: T. et al. The authoritarian personality. New York: Harper, 1950.
Athan, P. W., \& McCord, L. C. The implications for reduced working hours in a hospital setting (Doctoral dissertation, United International University, 1973). Dissertation Abstracts International, 1973, 33(7), 3364A.

Baldridge, J. V. Power and conflict in the university: Research in the sociology of complex organizations. New York: John Wiley \& Sons, Inc., 1971.

Bayer, A. E., \& Astin, H. S. Sex differences in academic rank and salary among science doctorates in teaching. Journal of Human Resources, 1968, 3, 191-199.

Berkowitz, L., \& Lutterman, K. Social Responsibility Scale in the traditionally socially responsible personality. Public Opinion Quarterly, 1968, 32, 169-185.

Bertrand, A. L. Social organization: A general systems and role theory perspective. Arlington Heights, I11.: AHM Publishing Corporation, 1972.

Birren, J. E. The psychology of aging. Englewood Cliffs, N. J.: Prentice-Hall, 1964.

Blaus P. M. The organization of academic work. New York: John Wiley \& Sons, 1973.

Bord, R. J. Impact of dogmatism on reactions to validated authority and anti-authority. Psychological Reports, 1976, 38, 1219-1222.

Campbell, M. V. Self-role conflict among teachers and its relationship to satisfaction, effectiveness, and confidence in leadership. Unpublished doctoral dissertation, University of Chicago, 1958.

Caplow, T. \& McGee, R. J. The academic marketplace. New York: Basic Books, 1958.

Carnoy, M. Education as cultural imperialism. New York: David McKay Company, 1974.

Centers, R., \& Bugental, D. E. Intrinsic and extrinsic job motivations among different segments of the working population. Journal of Applied Psychology, 1966, 50, 193-197.

Christensen, C. M. A note on "Dogmatism and Learning." Journal of Abnormal and Social Psychology, 1963, 66(1), 75-76.

Clark, B. R. Belief and loyality in college organization. Journal of Higher Education, June 1967, 499-515.

Cohen, H. V. Working efficiency as a function of noise level, work pace, and time at work (Doctoral dissertation, North Carolina State University at Raleigh, 1972). Dissertation Abstracts International, 1972, 33, 3975B.

Cohen, M. O., \& March, J. G. Leadership and ambiguity: The American college president. New York: McGraw-Hill, 1974.

Corson, J. J. The governance of colleges and universities. New York: McGraw-Hi11, 1975.

Costin, F. Dogmatism and learning: A follow-up of coñtradictory findings. Journal of Educational Researchers, 1965, 59, 186-188.

Cummings, M. S. Dogmatism, ideology, and political behavior (Doctoral dissertation, Stanford University, 1975). Dissertation Abstracts International, 1975, 35, 7973A.

Darling, F. C. Thalland in 1976: Another defeat for constitutional democracy. Asian Survey, 1977, 17(2), 116-132.

Diniravegin, L. Political attitudes of the bureaucratic elite and modernization in Thailand. Bangkok, Thailand: Thai Watana Panich Press Co., 1973.

DiRenzo, G. J. Dogmatism and orientations toward Iiturgical change. Journal for the Scientific Study of Religions, 1967, 7, 278.

Dodds, H. W. The academic president: Educator or caretaker. New York: McGraw-Hill, 1962.

Downs, A. Inside bureaucracy. Boston: Little, Brown, \& Co. Inc., i967.

Dressler, G. A test of the path-goal theory of leadership. Unpublished doctoral dissertation, City University of New York, 1973.

Ehrlich, H. J. Dogmatism and intellectual change. Unpublished Master of Arts thesis, Ohio State University, 1955.

Dogmatism and learning. Journal of Abnormal and Social Psychology, 1961, 62, 148-149.

Ellul, J. The technological society. New York: Vintage Books, 1964.
Embling, J. F. A fresh look at higher education: European implications of the Canegie Commission Reports. Amsterdams: Elsevier Scientific Publ. Co., 1974.

Emmerson, D. K. Students and politics in developing nations. New York: Frederick A. Praeger, Inc., 1968.

Etzioni, A. A comparative analysis of complex organizations: On power, involvement, and their correlates. New York: Free Press, 1961. - Modern organizations. Englewood Cliffs, N. J.: Prentic-Hall, Inc., 1964.

Feldman, D. A., \& Newcomb, T. M. The impact of college on students (Vol. 1). San Francisco: Jossey Bass, 1969.

Fillenbaum L., \& Jackson, A. Dogmatism and anxiety in relation to problem solving: An extension of Rokeach's results. Journal of Abnormal and Social Psychology, 1961, 63, 212-214.

Freedman, R., \& Coombs, L. Childspacing and family economic position. American Sociological Review, 1966, 31, 631-648.

Fromm, E. Man for himself. New York: Fawcett Publications, 1947.
$\qquad$ - The sane society. Greenwich, Conn.: Fawcett Publications, 1955.

Frumkin, R. M. Dogmatism, social class, values, and academic achievement in sociology. Journal of Educational Sociology, 1961, 34, 398-403.

Funk, C. D., \& Carter, G. L. The relationship between Dogmatism scores and performance ratings among adult educators. Adult Education Journal, 1971, 11(2), 46-55.

Gabennesch, H. Authoritarian as world view. American Journal of Sociology, 1972, 77, 857-875.

Gellman, E. S. Statistics for teachers. New York: Harper \& Row, Publishers, 1973.

Getzels, J. W. Conflict and role behavior in the educational setting. In W. W. Charters \& N. L. Gage (Eds.), Readings in the social psychology of education. Boston: Allyn \& Bacon, 1963.
, \& Guba, E. G. Social behavior and the administrative process. School Review, 1957, 65, 423-441.
, Lipham, J. M., \& Campbell, R. F. Educational administration as a social process: Theory, research, practice. New York: Harper \& Row, 1968.

Gibson, J. L., Ivancevich, J. M., \& Donnelly, I. H. Organizations: Structure, processes, behavior. Dallas, Texas: Business Publications, Inc., 1973.

Goheen, R. F. The human nature of a university. Princeton, N. J.: University of Princeton Press, 1969.

Guilford, J. P. The nature of human intelligence. New York: McGraw-Hill, 1967.

Halberstam, D. The best and the brightest. New York: Random House, 1972.
Hansen, J. I., \& Johansson, C. B. Strong vocational interest blank and dogmatism. Journal of Counseling Psychology, 1974, 2(3), 196.

Harrison, M. J., \& Weightman, K. Academic freedom in England and higher education. British Journal of Sociology, 1974, 25, 32-46.

Hertzler, J. O. Social institutions. New York: McGraw-Hill, 1929.
Higginbotham, T. E, Irrationality in college students. Rational Living, 1976, 11(1), 34.

Horton, P. B., \& Hunt, C. L. Sociology. New York: McGraw-Hill, 1976.
Hulin, C. L. Job satisfaction and turnover in female clerical population. Journal of Applied Psychology, 1966, 50, 280-285.

Jamias, J. F., \& Trodahl, V. C. Dogmatism, tradition, and general innovativeness. Unpublished manuscript, 1965.

Kemp, C. G. Influence of dogmatism on counseling. Personnel and Guidance Journal, 1961, 39, 662-665. . Critical thinking: Open and closed minds. American Behavioral Scientist, 1962, 5, 10-15. - Perception of authority in relation to open and closed belief systems. Science Education, 1963, 47, 482-484.

Kemp, G. G. Effect of dogmatism on critical thinking. School Sciences and Mathematic, 1966, 63, 380-392.

Kerlinger, F. N. Foundations of behavioral research. New York: Holt, Rinehart \& Winston, Inc., 1973.

La Sorte, M. A. Academic women's salaries: Equal pay for equal work. Journal of Higher Education, 1971, 42(4), 265.

- Sex differences in salary among academic sociology teachers. American Sociology, 1971, 6(4), 304.

Ladd, E. C., \& Lipset, S. M. Politics of academic natural scientists and engineers. Science, 1972, 176, 1091-1100.

New York: Norton, 1975 .
Laszlo, E. The systems view of the world. New York: George Braziller, 1972.

Lichtman, C. M. Some interpersonal response correlates of organizational rank. Journal of Applied Psychology, 1970, 54(1), 77-80.

Lipset, S. M. Democracy and working-class authoritarianism. American Sociological Review, 1959, 24, 482-501.

Locke, E. A. What is job satisfaction? Organizational Behavioral and Human Performance, 1969, 4, 309-336. - Smith, P. C., \& Hulin, C. L. Cornell studies of job V. scale characteristics of the Job Description Index. Mimeo, Cornell University, circa 1965.

Lorentz, R. J. Levels of dogmatism and attitudes toward marijuana. Psychological Reports, 1972, 30(1), 75-78.

Maccoby, M. The gamesman, the new corporate leaders. New York: Simon \& Schuster, 1976.

Meier, G. M. (Ed.). Leading issues in development economics. New York: Oxford University Press, 1964.

McCarthy, J., \& Johnson, R. C. Interpretation of the "City Hall Riots" as a function of general dogmatism. Psychological Reports, 1962, 11, 243-245.

Mehryar, A. H. Authoritarianism, rigidity, and Eyesenck's E. and N. dimensions in an authoritarian culture. Psychological Reports, 1970, 27, 326.

Minium, E. W. Statistical reasoning in psychology \& education. New York: John \& Sons, Inc., 1970.

Mumford, L. The myth of the machine. New York: Hartcourt, Brace \& World, 1966.

Nations, R. October Revolution- Part II. Far Eastern Economic Review, 1976, 94(October 15), 10-11.

Norman, R. P. Dogmatism and psychoneurosis in coliege women. Journal of Consulting Psychology, 1966, 30(3), 278.

Norris, E. L. Attitude change as a function of opening and closed-mindedness. Journalism Quarterly, 1965, 42, 571-575.

Office of the National Education Commission (Thailand). A research report on higher education system: A case study of Thailand. 1977.

Parsons, T. The social system. Glencoe, Ill.: Free Press, 1951.
Rada, A. A study of factors influencing job satisfactions of community college teachers. Unpublished doctoral dissertation, University of the Pacific, 1975.

Rebhun, M. T. Dogmatism and test anxiety. Journal of Psychology, 1966, 62, 39-40.

Renuart, W. R. A comparison of teacher dogmatism with administrators' perceptions of teacher behavior and with teachers' receptivity to change (Doctoral dissertation, University of Miami, 1973). Dissertation Abstracts International, 1974, 34, 3786A.

Richardson, R. C. \& Blocker, C. L. An item factorization of the faculty attitude survey. Journal of Experimental Education, 1966, 34(4), 89-93.

Richman, B. M., \& Farmer, R. N. Leadership, goals, and power in higher education. San Francisco: Jossey-Bass, 1974.

Robins, G. E., \& Rogers, D. E. Dogmatism and study time in high school students: Better to be wrong than long. Journal of Educational Research, 1975, 69(3), 120-121.

Robinson J. P.., Shaver P. R. Measures of social psychological attitudes. Ann Arbor, Michigan: Survey Research Center; Institute for Social Research, 1976.

Rokeach, M. The nature and meaning of dogmatism. Psychological Review, 1954: 61, 194-204.

Rokeach, M. Political and religious dogmatism: An alternative to the authoritarian personality. Psychological Monograph, No. 425, 1956, 43, 70.
(Ed.). The open and closed mind. New York: Basic Books, 1960.

- In pursuit of the creative process. In G. A. Steiner (Ed.), The creative organization. Chicago: University of Chicago Press, $1965 .{ }^{\circ}$
$\qquad$ , \& Restle, F. A fundamental distinction between open and closed systems. In M. Rokeach (Ed.), The open and closed mind. New York: Basic Books, 1960.

Rempel, A., \& Bentley, R. R. Teacher morale relationship with selected factors. The Journal of Teacher Education, 1970, 21 (4), 534-539.

Rose, A. A systematic summary of symbolic interactiunist theory. In A. Rose (Ed.), Human behaviour and social processes. London: Routledge \& Kegan Pau1, 1962.

Rosenfeld, H. M., \& Nauman, D. J. Effects of dogmatism on the development of informal relationship among women. Journal of Personality, 1969, 37, 497-511.

Sakler, J. Leadership, confidence in management and job satisfaction. Journal of Applied Behavioral Science, 1970, 6, 3-19.

Saha, L. J. How divisive are left-wing academics: Australian test. Sociology of Education, 1976, 49(1), 80-89.

Saxton, L. The individual, marriage, and the family. Belmont, Cal.: Wadsworth Publishing Co., 1972.

Schuler, R. S. Participation with supervisor and subordinate authoritarianism; A path-goal theory reconciliation. Administrative Science Quarterly, 1976, 21, 320-325.

Scott, W. G., \& Mitchell, T. R. Organizational theory: A structural and behavioral analysis. Homewood, Ill.: Richard D. Irwin, 1972.

Smith, P. C., et al. Cornell studies of job satisfaction: I, II, III, Mimeo, Cornell University, circa 1965.
$\qquad$ - The measurement of satisfaction in work and retirement. Chicago: Rand McNally, 1969.

Sprague, B. Q. Job satisfaction and university faculty. Unpublished doctoral dissertation, University of Kentucky, 1974.

Steffensmeier, D. J. Levels of dogmatism and attitudes toward law and order. Psycholugical Reports, 1974, 34, 151-153.

- Levels of dogmatism and social distance attitudes toward hippies. Psychological Reports, 1976, 38, 222.

Steffre, B., King, P., \& Leafgren, F. Characteristics of counselors judged effective by their peers. Journal of Counseling Psychology, 1962, 9, 335-340.

Steininger, M. Aptitude, dogmatism and college press as codeterminants of academic achievement. Journal of Social Psychology, 1970, 80, 229-230.

Stephens, W. E. Need levels, need satisfactions, and need deficiencies in college teachers. Unpublished doctoral dissertation, University of Missouri, 1974.

Stouffer, S. A. Communism, conformity, and civil liberties: A crosssection of the nation speaks its mind. New York: Doubleday \& Co., Inc., 1955.

Terhune, K. W. Self and nation: A study of the psychological nature of nationalism and patriotism. Dissertation Abstracts International, $1964 ; 24 ; 30044-30051$.

Toffler, A. Future shock. New York: Random House, 1970.
Tosi, H. L. A re-examination of personality as a determinant of the effect of participations. Personnel Psychology, 1973, 26, 339-350.

Tygart, C. E. Political liberalism-conservatism among university students: The question of dimensionality. Youth \& Society, 1975, 6(3), 298-308.

Uhes, M. J., \& Shaver, J. P. Dogmatism and divergent-convergent abilities. The Journal of Psychology, 1970, 75, 3-11.

Vacchiano, R. B=, Strause, D. D., \& Schiffman, D. C. Personality correlates of dogmatism. Journal of Consulting and Clinical Psychology, 1968, 32, 83-85.

Vande Loo, R. J. A social character analysis of individuals scoring openminded on the Dogmatism Scale. Unpublished doctoral dissertation, the Catholic University of America, 1975.

Victor, J. B. Peer judgements of teaching competence as a function of independence and dogmatism. Journal of Experimental Education, 1976, 44(3), 10-13.

Vidulich, R. N., \& Kaiman, I. P. The effects of information sources, status, and dogmatism upon conformity behavior. Journal of Abnormal and Social Psychology, 1961, 63, 639-642.

Vroom, V. Some personality determinants of the effects of participation. Journal of Personality and Social Psychology, 1959, 59, 322-327.

Wesman, A. G. Intelligence testing. American Psychology, 1968, 23, 267274.

Yinger, J. M. Toward a field theory of behavior. New York: McGraw-Hill Co., 1965.

Zagona, S. W., \& Zurcher, L. A. The relationships of verbal ability and other cognitive variables to the open-closed cognitive dimension. Journal of Psychology, 1965, 60, 213-219.

Zimmerman, R. F. Student revolution in Thailand: End of Thai bureaucratic polity. Asian Survey, 1974, 14(6), 509.

APPENDIX A
FACULTY QUESTIONNAIRE
ENGLISH VERSION

## FACULTY QUESTIONNAIRE

This questionnaire represents an attempt to survey the opinion of university professors upon society, higher education, and their professional positions. Your candid responses are very necessary to the study. The information you supply will be kept absolutely confidential.

PART I DEMOGRAPHIC DATA (1-23)
Please answer the following questions.

1. What is your present rank?
(1) Instructor
(2) Assistant Professor
(3) Associate Professor
(4) Drofessor
2. What kind of appointment do you have here?
(1) Regular with tenure
(2) Regular without tenure
(3) Special
(4) Visiting
3. During the regular term, how many hours per week are you spending in formal instruction? (Give actual, not credit hours.)
(1) None
(2) 1-4
(3) 5-6
(4) 7-8
(5) 9-10
(6) 11-12
(7) 13-16
(8) 17-20
(9) 21 or more
4. What are your teaching responsibilities this academic year?
(1) Entirely undergraduate
(2) Some undergraduate, some graduate
(3) Entirely graduate
(4) Not teaching this year
5. About how many students, at all levels, are enrolled in your courses this term?
(1) None
(2) Under 25
(3) 25-49
(4) 50-99
(5) 100-249
(6) 250-399
(7) 400-999
(8) 1,000 or more
6. At what institution are you employed?
(1) Kasetsat University
(2) Chulalongkorn University
(3) Mahiciol University
(4) Ramkamhaeng University
(5) Silpakorn University
(6) Sri-naiarin University
(7) Thanmasat University
(8) NIDA
7. What is your highest educational attainment?
(1) Assoicate degree or equivalent
(2) Bachelor's degree or equivalent
(3) Master's degree or equivalent
(4) Ph. D. or equivalent:
8. Identify major field of study in your last degree.
(1) Agriculture/Forestry
(2) Accounting, Commerce, and Business Administration
(3) Education
(4) Engineering
(5) Fine Arts, Drama, and Music
(6) Geography
(7) Medicine
(8) Nursing
(9) Public Health, Health Education
(10) Pharmacy
(11) Medical Science
(12) Home Economics
(13) Humanities
(14) Industrial Arts
(15) Journalism
(16) Law
(17) Library Science
(18) Sciences (Pure)
(19) Archeology
(20) Anthropology
(21) Economics
(22) Political Science, Government
(23) Sociology
(24) Others
9. Have you ever had educational training abroad? (If yes, please also answer 10 and 11.)
(1) Yes
(2) No
10. In what country did you have your educational training? (In case more than one country, please indicate where you stayed the longest.)
(1) The United States, Canada
(2) European countries
(3) Asian couniries
(4) Australia, New Zealand
(5) Others
11. How many years did you study abroad?
(1) Less than 1 year
(2) 1-2
(3) 3-4
(4) 5 years or more
12. How long have you worked in the field of education?
(1) 1 year or less
(2) $2-3$
(3) $4-6$
(4) 7-9
(5) $10-14$
(6) $15-19$
(7) $20-29$
(8) 30 or more
13. How long have you worked at this institution?
(1) 1 year or less
(2) 2-3
(3) 4-6
(4) 7-9
(5) $10-14$
(6) $15-19$
(7) 20-29
(8) 30 or more
14. In a normal week, what proportion of your work time is devoted to administration. (Departmental or institutional, including committee work)
(1) None
(2) $1-10 \%$
(3) $11-20 \%$
(4) $21-40 \%$
(5) $41-60 \%$
(6) 61-80\%
(7) $81-100 \%$
15. How many anticles have you published in academic or professional journals?
(1) None
(2) 1-2
(3) $3-4$
(4) $5-10$
(5) 11 or more
16. How many books or monographs have you published or edited, alone or in collaboration?
(1) None
(2) 1-2
(3) $3-4$
(4) $5-10$
(5) 11 or more
17. Does your interest lie primarily in teaching or in research?
(1) Very heavily in research
(2) In both, but leaning toward research
(3) In both, but leaning toward teaching
(4) Very heavily in teaching
18. What is your total income at this institution, for the academic year?
(1) 15,000bahts or less
(2) $15,001-20,000$
(3) 20,001-25,000
(4) 25,001-30,000
(5) $30,001-40,000$
(6) 40,001-50,000
(7) 50,001-70,000
(8) 70,001 or more
19. What is your annual income earned outside this institution?
(1) 3,000 bahts or less
(2) 3,001-5,000
(3) $5,001-10,000$
(4) $10,001-30,000$
(5) $30,001-50,000$
(6) 50,001 or more
20. What is your marital status?
(1) Single
(2) Married
21. How many children do you have?
(1) None
(2) 1
(3) 2
(4) 3
(5) 4 or more
22. How old are you?
(1) 24 years or younger
(3) $30-34$
(2) 25-29
(5) 40-44
(4) 35-39
(7) $50-54$
(6) 45-49
(8) 55 or older
23. What is your sex?
(1) Male
(2) Female

## PART II YOUR OPINION UPON SELVES AND SOCIETY (24-71)

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view. You may find yourself agreeding strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that many people feel the same as you.

Write the number of your choice according to how much you agree or disagree with it. Please answer every question.

| 1: I AGREE VERY MUCH | 2: | I AGREE ON THE WHOLE |
| :--- | :--- | :--- |
| 3: | I AGREE A LITTLE | 4: |
| 5: | DISAGREE A LITTLE |  |
| 5: | DISAGREE ON THE WHOLE | 6: |
| I | DISAGREE VERY MUCH |  |

24. The United States and Russia have just about nothing in common.
25. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
26. Even though freedom of speech for all groups is a worthwhile goals, it is unfortunately necessary to restrict the freedom of certain political groups.
27. It is only natural that a person would have a much better acquaintance with ideas he believes in that with ideas he opposes.
28. Man on his own is a helpless and miserable creature.
29. Fundamentally, the world we live in is a pretty lonesome place.
30. Most people just don't give a "damn" for others.
31. I'd like it if $I$ cuuld find someone who would tell me how to solve my personal problems.
32. It is only natural for a person to be rather feariful of the future.
33. There is so much to be done and so little time to do it in.
34. Once I get wound up in a heated discussion I just can't stop.
35. In a discussion $I$ often find it necessary to repeat myself several times to make sure I am being understood.

| 1: I AGREE VERY MUCH | $2:$ | I AGREE ON THE WHOLE |
| :--- | :--- | :--- |
| 3: I AGREE A LITTLE | $4:$ | I DISAGREE A LITTLE |
| 5: I DISAGREE ON THE WHOLE | $6:$ | I DISAGREE VERY MUCH |

36. In a heated discussion I generally become so absorbed in what $I$ am going to say that $I$ forget to listen to what others are saying.
37. It is better to be a dead hero than a live coward.
38. While $I$ don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.
39. The main thing in life is for a person to want to do something important.
40. If given the chance $I$ would do something of great benefit to the world.
41. In the history of mankind there have probably been just a handful of really great thinkers.
42. There are a number of people I have come to hate because of the things they stand for.
43. A man who does not believe in some great cause has not really lived.
44. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
45. Of all the different philosophies which exist in this world there is probably only one which is correct.
46. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.
47. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
48. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
49. In times like these, a person must be pretty selfish if he considers primarily his own happiness.
50. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

| 1: I AGREE VERY MUCH | $2:$ | I AGREE ON THE WHOLE |
| :--- | :--- | :--- |
| 3: I AGREE A LITTLE | 4: | I DISAGREE A LITTLE |
| 5: I DISAGREE ON THE WHOLE | 6: | I DISAGREE VERY MUCH |

51. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.
52. A group which tolerates too many differences of npinion among its own members cannot exist for long.
53. There are two kinds of people in this world: those who are for the truth and those who are against the truth.
54. My blood boils whenever a person stubbornly refuses to admit he's wrong.
55. A person who thinks primarily of his own happiness is beneath contempt.
56. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
57. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
58. It is often desirable to reserve judgement about what is going on until one has had a chance to hear the opinions of those one respects.
59. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
60. The present is all too often full of unhappiness. It is only the future that counts.
61. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."
62. Unfornately a good many people with whom I have discussed important social and moral problems don't really understand what's going on.
63. Most people just don't know what's good for them.
64. It is no use worrying about current events or public affairs; I can't do anything about them anyway.
65. Every person should give some of his time for the good of his town or country.

| 1: | I AGREE VERY MUCH | $2:$ | I AGREE ON THE WHOLE |
| :--- | :--- | :--- | :--- |
| 3: | I AGREE A LITTLE | $4:$ | I DISAGREE A LITTLE |
| 5: I DIŚAGREE ON THE WHOLE | 6: | I DISAGREE VERY MUCH |  |

66. Our country would be a lot better off if we didn't have so many elections and people didn't have to vote so often.
67. Letting your friends down is not so bad because you can't do good all the time for everybody.
68. It is the duty of each person to do his job the very best he can.
69. Deople would be a lot better off if they could live far away from other people and never have to do anything for them.
70. At school I usually volunteered for special projects.
71. I feel very bad when I have failed to finish a job I promised I would do.

PART III YOUR OPINION UPON HIGHER EDUCATION (72-79)
72. This institution should be as concerned about students' personal values as it is with their intellectual development.
73. A man can be an effective teacher without personaiiy involving himself with his students.
74. This institution should be actively engaged in solving sccial problems.
75. Our higher education would much improve if students were required to spend 1 year of practical training in the community.
76. We should not allow any political activities on a university campus.
77. Faculty members should be free to present in class any idea that they consider relevant.

For items 78 and 79 , select the number of your choice below.

1: VERY FAVORABLE 2: FAIRLY FAVORABLE 3: NO EFFECT
4: FAIRLY HARMFUL 5: VERY HARMFUL
78. What effect did political and social situations during October 14 , 1973 to October 6, 1976 have on your work?
79. What effect have political and social situations after October 14, 1976 to October 20 , 1976 have on your work?

PART IV YOUR JOB DESCRIPTION (80-151)
Select " 1 " if the item describes a particular aspect of your job (e.g., work, pay, etc.), " 2 " if you cannot decide, or " 3 " if the item does not describe that aspect.

## Work

30. Fascinating
31. Satisfying
32. Good
33. Respected
34. Pleasant
35. Tiresome
36. Challenging
37. Frustrating
38. Endless
39. Routine
40. Boring
41. Creative
42. Hot
43. Useful
44. Healthful
45. On your feet
46. Simple
47. Give sense of accomp1ishment

## Supervisor

98. Asks my advice
99. Impolite
100. Tactíui
101. Up-to-date
102. Quick-tempered
103. Annoying
104. Knows job wel1
105. Intelligent
106. Around when needed

People
116. Stimulating
118. Slow
120. Stupid
122. Fast
124. Easy to make enemies
126. Smart
128. Unpleasant
130. Active
132. Loyal
99. Hard to please
101. Praises good work
103. Influential
105. Doesn't supervise enough
107. Tells me where I stand
109. Stubborn
111. Bad
113. Leaves me on my own
115. Lazy
117. Boring
119. Ambitious
121. Responsible
123. Intelligent
125. Talk too much
127. Lazy
129. No privacy
131. Narrow interests
133. Hard to meet

## Pay

134. Income adequate for normal expenses
135. Barely live on income
136. Income provides luxuries
137. Less than I deserve
138. Underpaid
139. Satisfactory profit sharing
140. Bad
141. Insecure
142. Highly paid

## Promotions

143. Good opportunity for advancement
144. Promotion on ability
145. Good chance for promotion
146. Infrequent promotions
147. Fairly good chance for promotion
148. Opportunity somewhat limited
149. Dead-end job
150. Unfair promotion policy
151. Regular promotions

APPENDIX B
FACULTY QUESTIONNAIRE
thai version

(1) อนุปปโฆตา
(2) 1 ริฯघากร์

(4) ปริมมาเกก

(1) เกษกรศาสกร์ขปาไม
(2) บัตริ การก้า และบริหารุุงกิจ
(3) การศึกษา
(4) วิศวกรรมศาสตร์
(5) ริดมมาสตร์
(6) ภูมิศาสตร์
(7) แพหยหาสกร
(8) กยาบาล
(9) สาปารมมุุณาสตร์
(10) เภสสัศาสคร์
(11) วิทยาศาสตร์การแพทย์
(12) เคหเศศษรูาสกร์
(13) มนุยแศาสกร์
(14) ถุศสาหกรรมศาสตร์
(15) วารสารศาสตร์ สื่อบวลสน (16) กมหมาย
(17) บรรณรกู่ยาสตร์
(18) วิทยาศาสเตร์
(19) โบรามคคี่
(20) มนุョยวิหยา
(21) เศรษฯศาสตร

(23) สังคมวิทยา

(1) เกย
, , ไม่เตย
 นานที่สุต)
(1) ป:ะเหศสหรัฐอเมริกา หรือ แคนากา

(3) ประเทคในทวิปเเยเตีย

- (4) ประเทำออสเตรเลื่ย หรือ นิวชินลนด์
(5) ประเทศอม่นา

(1) กั่ากว่า 1 í
(2) 1 - 2 4
(3) 3-4 1
(4) 5 ปิหรื้อนานกว่า
12.ท่านได้ต่างานเกี่ยวกับการสอนหริอการศึกษาเป็นเวสานานเท่าใด
(1) 1 บิตรี่อนอยกว่า
(2) $2-3$ -
(3) 4-6 1
(4) 7 - 9 ปี
(5) $10-14$ i
(6) $15-19$ ป
(7) $20-29$ i
(8) 30 ปิ หรือมากกว่า

(1) 1 บิหรีอนอยกว่า
(2) $2-3$ i
(3) $4-6$ II
(4) 7-9 ㄴ
(5) $10-14$ it
(6) $15-19$ i
(7) $20-29$ i
(8) 30 ปิ หรีอมากกว่า
14.ในสับกาห์ปกกิ้ ท่านใช้เวลาส่าหรับงานเกี่ยวกับการบริหาร เป็นอัคราส่านเห่าใด (วองภาก นมนก คณะ สถาบัน รวมด้งงาแประรุมชองกฉมกกรรมการต่างๆา
(1) ไมม่เละ
(2) $1-20 \%$
(3) $21-40 \%$
(4) $41-60 \%$
(5) $61-80 \%$
(6) $81-100 \%$
15.ห่านเคย่ จึยยบบความลงในวารสารทางวิฐาการกิ่บตความ
(1) ไม่เคยเ จียน
(2) 1-2 บทตวาม
(3) 3-4 บทความ
(4) 5-10 บทความ
(5) 11 บทความหรีอมากกว่า

(1) ไม่คยเจิยน
(2) $1-2$ เลม
(3) 3-4 เลม
(4) $5-10$ เลม
(5) 11 หรือมากกว่า


## 

(1) สนใจงานลนคว้ามาก

(3) สนใจหั้งสองค้าน มก่หนกกตางต้านงานสอน
(4) สนใจงานสอนมาก






(1) เสบกวบบบ่างต่ง
(2) ! xumy


(5) ไม่ เนทัว



 กุุมบการเมืองบางกดุ่











 หรีย เฮกเปียร์



42. มืคนจำสวกหนึ่งหึ่อกนไมชอบเตราะมีความเชื่อไม่เหมีอนกัน


45. ในปรัชぬามี่แตกต่างและมักแยงกันนน มางหิมิกุกต้องได้เติยงอันเกิยวเห่านัน
46. คนที่รูนมในถุดมการม์เกินไปเป็นกนที่เพ้เจ้ว

 กางไป่จากเรา


51. ในภาว เร่นน้้ ควรจะควบุุมความกิกรองตวกกนเจงเสียยิ่งกว่าย่ายครงษ้าม



55. คนหิ่คิกนคคจะหาความสุษส่วนกัวควรไก้ร้บการประนาม
56. ต้อกิกรอเชิยนในบัจจุบันแบจะหาสาระอะไงไม่ใด้
 ชาษท่่ใว่าไต
 เสียกอบ



 สภาทบ้อเท็จจรงง







70. เม่่อกอนยังเร้ยนหนังสื่ออยู่ ดันขอบอาสาทำกิจกรรมติเศษอยยเสมอ


(1) เห็นคว่ายย่างยิ่ง
(2) เทึนค้วย
(3) เนน้ก้วยเปี้นบางส่วน
(4) ไม่เห็นค่วยเป็นบางส้วน
(5) ไม่เห๋นกว่
(6) ไมเหนนกวยอยางยิ่ง


74. สถคนันแห่งนิ้ควรมีส่นร่วมในการนกับัญหาสังกมอย่างจริงจัง
75. การถุคมศึกษาชองประเทศจะพัผนามากกว่นี้หากมึการกำหนกใหนักศึกษาออกไปยึกงานในรุมฐน

ลนละ 1 ป
76. เราไม่ค่วรปล่อยให้้มีกิจกรรมการเมืองษองนักศึกษาในบริเวแมหาวิทยาลัย
77. คณาจารย์ควรเป็นอิสระในการสอนเกี่ยวกับแนวความคิกใดา ที่เหนว่าเหมาะสบ
78. ในชวงภายหลัง 14 ทุลากม ก.ศ. 2516 จนถึง 6 ตุลากม ท. ก. 2519 สภาพการเมืองและลังกมม มีแลต่อการหำงานของท่านอยางใรบาง
(1) เป็นยลคืมาก
(2) เป็นแลดิ
(3) ไมมี่นสแต่อยางใก
(4) ! บ็น แลร้าย
(5) เปนยลรายมาก
 ทำงานของทานอยางเรบาง
(i) เบ่นยลกีมาก
(2) เป็นอมดี

(4) เป็นผลรัาย
(5) เป็นแลรายมาก.

（1）สอกคอองกับความรีสสก
（2）ไมสามารดตักสึนใจได้
 การงานจองท่าน มืลักษณะกังค่อไปนี้
80．ไป็นทิ่ประทับใ？ 8
81．เป็นกิจวัตร เร่อยา 82．เป็นทึ่นาพอใจ
83．นาเบื่อ 84．ที
86．ไก้ับการยกย่ยง
87．รอน
85．นาสรางอรร

89．เม็นปร＝โยฯน์์
90．นาเทนีอย
88．สนุก

93．ตองยีนเป็นปประจำ
91．ถุกสุฐลักษณะ
92．ทาหาย
96．ไมรูจบส้น
94．อัตัันกันใช
95．号哃
97．ประสสบความลำเร็จ


98．ตอคำปรีกษาจากนัน
101．รมเมื่อทำงานกี
104．ทันสมัย
107．กิต กามดลงานและบอกใหร่ 108．นาราคาด
110．รัจักมนนดี
113．ใหอิสระในการทำงศน

99．เอาใจยาก
102．มีลูกเร่น
105．ไม่ใหการนิเทตเกียงกอ

111． 1 1az


116．สสยใหกำลังใร
119．โโความกาวหนา
122．รวก1รึว
125．กุคมากเกินไป
128．ไมนาสึ่นม：
131．ม่ความสนใระคบ
$117=$ ำ 1 雷
120．โง่งตา

125：ฉลาท

132．จริงใจตอกัน

118． 9
121．มึ่วามรับฝิกฐอบดื

127．【ื้เกี่ยจ

133．ทากัตยาก

รายได้จากสถาบัม มีลกษมะกัตต่อไปนี้


# 140. ไมีุมูกกบที่ท่างาม <br> 141. จายใหอยางสูง 142. จายาใหบดราไป  <br>  <br> 145. กิจารมากวามสามารถ <br> 147. ม่ไอกาสเลื่อนข้นหรีอคานหน่งส <br> 149. นานๆ จิงจะมี่โอกาสเลื่อนชัน <br> 151. โอกาสการเลื่อนฮันคืพอใร้ <br> 144. โอกาสค่อนฐ้างจำกัก <br>  <br> 148. นโยบายการเลือนข้นชากความยุกิกรรม <br> -150. ไก้ลื้่อนตั้นเสมอา 

 เฉมาะกระถาษกาตอบ ส่วนกระกาษกำถาบน้้ไมตองส่งงคืน

APPENDIX C

SUMMARY TABLES OF ONE-WAY ANALYSIS OF VARIANCE

Table 22
One-Way Analysis of Variance: Differences in the Dogmatism Scores of University Professors Grouped According to 23 Demographic Items

| Item | Source of Variation | D.F. | Sum of Squares | Mean Sqaures | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Between | 1 | 2261.78 | 2261.78 | 2.848 |
|  | Within | 331 | 262866.92 | 794.16 |  |
|  | Total | 332 | 265128.69 |  |  |
| 2 | Between | 1 | 194.73 | 1904.73 | 2.377 |
|  | Within | 329 | 263586.84 | 801.18 |  |
|  | Total | 330 | 265491.56 |  |  |
| 3 | Between | 5 | 1372.16 | 274.43 | . 338 |
|  | Within | 314 | 255212.06 | 812.78 |  |
|  | Total | 319 | 256584.19 |  |  |
| 4 | Between | 2 | 2956.41 | 1478.20 | 1.928 |
|  | Within | 316 | 242277.29 | 766.70 |  |
|  | Total | 318 | 245233.69 |  |  |
| 5 | Between | 4 | 916.35 | 229.09 | . 284 |
|  | Within | 310 | 250276.32 | 807.34 |  |
|  | Total | 314 | 251192.63 |  |  |
| 6 | Between | 6 | 981.91 | 163.65 | . 203 |
|  | Within | 316 | 263130.77 | 807.15 |  |
|  | Total | 332 | 264112.69 |  |  |
| 7 | Between | 2 | 437.93 | 218.96 | . 275 |
|  | Within | 326 | 259381.84 | 795.65 |  |
|  | Total | 328 | 259819.75 |  |  |
| 8 | Between | 1 | 3983.85 | 3983.85 | 4.983* |
|  | Wi.thin | 319 | 255042.03 | 799.51 |  |
|  | Total | 320 | 259025.88 |  |  |
| 9 | Between | 1 | 884.92 | 884.92 | 1.103 |
|  | Within | 331 | 265634.25 | 802.52 |  |
|  | Total | 332 | 266519.13 |  |  |

Note. ${ }^{*}$ p $<.05$

Table 22 (Continued)

| Item | Source of Variation | D.F. | Sum of Squares | Mean Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Between | 2 | 2871.10 | 1435.55 | 1.805 |
|  | Within | 332 | 264009.25 | 795.21 |  |
|  | Total | 334 | 266880.31 |  |  |
| 11 | Between | 3 | 264.57 | 88.19 | . 109 |
|  | Within | 216 | 17.4265 .80 | 806.79 |  |
|  | Total | 219 | 174530.31 |  |  |
| 12 | Between | 6 | 6724.88 | 1120.81 | 1.416 |
|  | Within | 325 | 257217.71 | 791.44 |  |
|  | Total | 331 | 263942.56 |  |  |
| 13 | Between | 6 | 2877.69 | 479.61 | . 595 |
|  | Within | 327 | 263515.73 | 805.86 |  |
|  | Total | 333 | 266393.38 |  |  |
| 14 | Between | 4 | 2918.61 | 729.65 | . 913 |
|  | Within | 328 | 262214.43 | 799.43 |  |
|  | Total | 332 | 265133.00 |  |  |
| 15 | Between | 4 | 6409.99 | 1602.50 | 2.018 |
|  | Within | 328 | 260417.42 | 793.96 |  |
|  | Total | 332 | 266827.38 |  |  |
| 16 | Between | 3 | 2057.93 | 685.98 | . 853 |
|  | Within | 328 | 263775.72 | 804.19 |  |
|  | Total | 331 | 265833.63 |  |  |
| 17 | Betreen | 3 | 4007.05 | 1335.68 | 1.692 |
|  | Within | 327 | 258159.92 | 789.48 |  |
|  | Total | 330 | 262166.94 |  |  |
| 18 | Between | 6 | 3414.46 | 569.08 | . 706 |
|  | Within | 326 | 262961.17 | 806.63 |  |
|  | Total | 332 | 266375.63 |  |  |
| 19 | Between | 2 | 923.27 | 461.64 | . 61.3 |
|  | Within | 314 | 236608.81 | 753.53 |  |
|  | Total | 316 | 237532.0E |  |  |

Table 22 (Continued)

| Item | Source of <br> Variation | D.F. | Sum of <br> Squares | Mean <br> Squares | F Ratio |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 20 | Between | 1 | 18.14 | 18.14 | .023 |
|  | Within | 328 | 262888.38 | 801.49 |  |
|  | Total | 329 | 262906.50 |  |  |
|  | Between | 3 | 1566.20 | 522.07 | .673 |
|  | Within | 287 | 222653.66 | 775.80 |  |
|  | Totai | 290 | 224219.81 |  |  |
|  |  |  |  |  |  |
|  | Between | 4 | 6668.86 | 1667.21 | 2.093 |
|  | Within | 325 | 258385.49 | 796.57 |  |
|  | Total | 329 | 265554.31 |  |  |
|  | Between | 1 | 5771.41 | 6771.41 | $8.646 *$ |
|  | Within | 332 | 260004.94 | 783.15 |  |
|  | Total | 335 | 266776.31 |  |  |

Note. ${ }^{*} \mathrm{p}<.05 ;{ }^{* *} \mathrm{p}<.01$

Table 23

One-Way Analysis of Variance: Differences
in the Dogmatism Scores of University Professors
Grouped According to the Opinions upon Higher Education Issues

| Item | Source of Variation | D.F. | Sum of Squares | Mean Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 72 | Between | 1 | 124.28 | 124.28 | . 154 |
|  | Within | 328 | 263966. 29 | 804.78 |  |
|  | Total | 329 | 264090.56 |  |  |
| 73 | Between | 1 | 1118.02 | 1118.02 | 1.401 |
|  | Within | 333 | 265759.81 | 798.08 |  |
|  | Total | 334 | 266877.81 |  |  |
| 74 | Between | 1 | 355.79 | 355.79 | . 448 |
|  | Within | 331 | 263148.42 | 795.01 |  |
|  | Total | 332 | 263504.19 |  |  |
| 75 | Between | 1 | 358.22 | 358.22 | . 452 |
|  | Within | 332 | 263152.23 | 792.63 |  |
|  | Total | 333 | 263510.44 |  |  |
| 76 | Between | 1 | 8572.26 | 8572.26 | 11.199*** |
|  | Within | 330 | 252593.38 | 765.43 |  |
|  | Total | 331 | 261165.63 |  |  |
| 77 | Becween | 1 |  | $432.09$ | . 545 |
|  | Within | 332 | 263077.42 | $792.40$ |  |
|  | Total | 333 | 263509.50 |  |  |
| 78 | Between | 2 | 7480.79 | 3740.39 | 4.758** |
|  | Within | 326 | 256264.57 | 786.09 |  |
|  | Total | 328 | 263745.31 |  |  |
| 78 | Between | 2 | 16710.88 | 8355.44 | 11.008*** |
|  | Within | 327 | 248209.63 | 759.05 |  |
|  | Total | 329 | 264920.50 |  |  |

Note. ${ }^{*} \mathrm{p}<.05 ; * *_{\mathrm{p}}<.01 ; * * *_{\mathrm{p}}<.001$

Table 24

One-Way Analysis of Variance: Differences in the JDI Scores of University Professors Grouped According to 23 Demosraphic Items

| Item | Source of Variation | D.F. | Sum of Squares | Mean Squares | $F$ Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Between | 1 | 853.88 | 853.88 | 1.801 |
|  | Within | 331 | 156899.88 | 474.02 |  |
|  | Total | 332 | 157753.75 |  |  |
| 2 | Between | 1 | 982.67 | 982.67 | 2.087 |
|  | Within | 329 | 154900.41 | 470.82 |  |
|  | Total | 330 | 155883.06 |  |  |
| 3 | Between | 5 | 2674.99 | 535.00 | 1.127 |
|  | Within | 314 | 149093.07 | 474.82 |  |
|  | Total | 319 | 151768.06 |  |  |
| 4 | Between | 2 | 1159.80 | 579.90 | 1.221 |
|  | Within | 316 | 150122.50 | 475.07 |  |
|  | Total | 318 | 151282.25 |  |  |
| 5 | Between | 4 | 6776.17 | 1694.04 | 3.717** |
|  | Within | 310 | 141291.82 | 455.78 |  |
|  | Total | 314 | 148067.94 |  |  |
| 6 | Between | 6 | 11515.11 | 1919.19 | 4.292*** |
|  | Within | 326 | 145775.50 | 447.16 |  |
|  | Total | 332 | 157290.56 |  |  |
| 7 | Between | 2 | 1266.49 | 633.25 | 1.335 |
|  | Within | 326 | 154587.98 | 474.20 |  |
|  | Total | 328 | 155854.44 |  |  |
| 8 | Between | 1 | 3866.59 | 3866.59 | 8.145** |
|  | Within | 319 | 151443.04 | 474.74 |  |
|  | Total | 320 | 155309.56 |  |  |
| 9 | Between | 1 | 915.10 | 915.10 | 1.925 |
|  | Within | 331 | 157369.57 | 475.44 |  |
|  | Total | 332 | 158284.63 |  |  |

Note. ${ }^{*} \mathrm{p}<.05 ; * * \mathrm{p}<.01 ; * * * \mathrm{p}<.001$

Table 24 (Continued)

| Item | Source of Variation | D.F. | Sum of Squares | Mean Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Between | 2 | 1735.89 | 867.95 | 1.837 |
|  | Within | 332 | 156822.73 | 472.36 |  |
|  | Total | 334 | 158558.56 |  |  |
| 11 | Between | 3 | 1529.58 | 509.86 | 1.104 |
|  | Within | 216 | 99766.63 | 4,61.89 |  |
|  | Total | 219 | 101296.19 |  |  |
| 12 | Between | 6 | 5008.37 | 834.73 | 1.783 |
|  | Within | 325 | 152150.39 | 468.16 |  |
|  | Total | 33 i | 157158.75 |  |  |
| 13 | Between | 6 | 3593.61 | 598.93 | 1.265 |
|  | Within | 327 | 154772.52 | 473.31 |  |
|  | Total | 333 | 158366.06 |  |  |
| 14 | Between | 4 | 8033.02 | 2008.26 | 4.427** |
|  | Within | 328 | 148810.01 | 453.69 |  |
|  | Total | 332 | 156843.00 |  |  |
| 15 | Between | 4 | 4312.26 | 1078.06 | 2.293 |
|  | Within | 328 | 154242.59 | 470.25 |  |
|  | Total | 328 | 158554.81 |  |  |
| 16 | Between | 3 | 874.88 | 291.63 | . 616 |
|  | Within | 328 | 155388.43 | 473.75 |  |
|  | Total | 331 | 156263.25 |  |  |
| 17 | Butween | 3 | 2454.22 | 818.07 | 1.722 |
|  | Within | 327 | 155335.00 | 475.03 |  |
|  | Total | 330 | 157789.19 |  |  |
| 18 | Between | 6 | 7166.09 | 1.194 .35 | 2.575* |
|  | Within | 326 | 151199.16 | 463.80 |  |
|  | Total | 332 | 158365.19 |  |  |

Note. *p < . 05; **p < . 01 ; ***p < . 001

Table 24 (Continued)

| Item | Source of Variation | D.F. | Sum of Squares | Mean Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Between | 2 | 4383.68 | 2190.84 | 4.606** |
|  | Within | 314 | 149431.37 | 475.90 |  |
|  | Total | 316 | 153815.00 |  |  |
| 20 | Between | 1 | 2226.56 | 2226.56 | 4.761* |
|  | Within | 328 | 153408.75 | 467.71 |  |
|  | Total | 329 | 155635.25 |  |  |
| 21 | Between | 3 | 639.36 | 213.12 | . 423 |
|  | Within | 287 | 144670.34 | 504.08 |  |
|  | Total | 290 | 145309.69 |  |  |
| 22 | Between | 4 | 2834.15 | 708.54 | 1.496 |
|  | Within | 325 | 153949.81 | 473.69 |  |
|  | Total | 329 | 156783.94 |  |  |
| 23 | Between | 1 | 1005.23 | 1005.23 | 2.131 |
|  | Within | 332 | 156579.70 | 471.63 |  |
|  | Total | 333 | 157584.88 |  |  |

Note. *p < . $05 ; * * \mathrm{p}<.01$; ***p < . 001

## Table 25

One-Way Analysis of Variance: Differences in the IDI Scores of University Professors Grouped According to the Opinions upon Higher Education Issues

| Item | Sburce of Variation | D.F. | Sum of Squares | Mean Squares | F Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 72 | Between | 1 | 57.53 | 57.53 | . 120 |
|  | Within | 328 | 157231.43 | 479.36 |  |
|  | Total | 329 | 157288.94 |  |  |
| 73 | Between | 1 | 1189.30 | 1189.30 | 2.517 |
|  | Within | 333 | 157367.56 | 472.58 |  |
|  | Total | 334 | 158556.81 |  |  |
| 74 | Between | 1 | 38.44 | 38.44 | . 080 |
|  | Within | 331 | 158275.59 | 478.17 |  |
|  | Total | 332 | 158314.00 |  |  |
| 75 | Between | 1 | 138.72 | 138.72 | . 291 |
|  | Within | 332 | 158187.43 | 476.47 |  |
|  | Total | 333 | 158326.13 |  |  |
| 76 | Between | 5 | 6281.06 | 1256.21 | 2.697* |
|  | Within | 326 | 151817.26 | 465.70 |  |
|  | Total | 331 | 158098.31 |  |  |
| 77 | Between | 1 | 695.21 | 695.21 | 1.464 |
|  | Within | 332 | 157629.82 | 474.78 |  |
|  | Total | 333 | 158325.00 |  |  |
| 78 | Between | 2 | 6780.56 | 3390.28 | 7.464*** |
|  | Within | 326 | 148074.19 | 454.22 |  |
|  | Total | 328 | 154854.69 |  |  |
| 79 | Between | 2 | 1336.15 | 668.08 | 1.400 |
|  | Within | 327 | 156094.68 | 477.35 |  |
|  | Total | 329 | 157430.81 |  |  |

Note. ${ }^{*} \mathrm{p}$ 人 . $05 ; * * * \mathrm{p}<.001$

## APPENDIX D

FREQUENCY COUNTS, MEANS, AND STANDARD DEVIATIONS

Table 26
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Professors Grouped According to Major Field ${ }^{\text {a }}$

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | :--- | :--- |
| Non-Social Sciences <br> Social Sciences |  |  |  |
| Total | 266 | 166.11 | 28.66 |

Table 27
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Professors Grouped According to Sex

| Group | Count | Mean | Standard <br> Deviation |
| :--- | :--- | :---: | :---: |
| Male | 168 | 168.57 | 27.81 |
| Female | 166 | 159.57 | 28.16 |
| Total | 334 | 164.10 | 28.30 |

Table 28
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Professors Grouped According to the SRS Scores

| Group | Count | Mean | Standard <br> Deviation |
| :--- | :---: | :---: | :---: |
| Low SRS | 199 | 160.76 | 28.75 |
| High $\frac{\text { SRS }}{}$ | 136 | 168.90 | 26.93 |
| Total | 335 | 164.07 | 28.27 |

Table 29
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Professors Grouped According to Attitudes toward Banning Students' Political Activities

| Group | Count | Siandard <br> Deviation |  |
| :--- | :---: | :---: | :---: |
| Agree | 131 | 170.27 | 24.80 |
| Disagree | 210 | 159.87 | 29.38 |
| Total | 332 | 163.97 | 28.10 |
|  |  |  |  |

Table 30
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Profeşsors Grouped According to the Political Effect

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | :---: | :---: |
| Favorable | 50 | 168.34 | 30.16 |
| No Effect | 228 | 161.27 | 27.42 |
| Harmful | 51 | 173.76 | 28.63 |
| Total | 329 | 164.28 | 28.36 |

Table 31
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Professors Grouped According to the Political Effect ${ }^{\text {a }}$

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | :---: | :---: |
| Favorable | 48 | 181.44 | 24.38 |
| No Effect | 232 | 161.34 | 28.42 |
| Harmful | 50 | 160.86 | 26.24 |
| Total | 330 | 164.19 | 28.38 |

Note. ${ }^{\text {a }}$ The political and social effects after October 6, 1976 to October 20, 1977 on their work

Table 32
Frequency Counts, Means, and Standard Deviations of the Dogmatism Scores of University Professors Grouped According to Numbers of Students Enrolled in Their Courses

| Group | Count | Mean | Standard <br> Deviation |
| :---: | :---: | :---: | :---: |
| Under 25 | 35 | 150.00 | 21.60 |
| $25-49$ | 45 | 160.00 | 22.68 |
| $50-99$ | 7.4 | 161.50 | 21.43 |
| $100-249$ | 99 | 162.54 | 20.92 |
| 250 and more | 62 | 167.16 | 20.79 |
| Total | 315 | 161.50 | 21.72 |

Table 33
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors
. Grouped According to Institution

| Group | Count | Mean | Standard <br> Deviation |
| :--- | :---: | :---: | :---: |
| Kasetsat University. | 65 | 157.58 | 22.52 |
| Chulalongkorn University | 43 | 159.35 | 18.40 |
| Mahidol University | 64 | 158.77 | 20.75 |
| Ramkamhaeng University | 35 | 171.00 | 18.66 |
| Silpakorn University | 53 | 164.06 | 21.51 |
| Thammasat University | 34 | 150.24 | 24.33 |
| Others Combined | 35 | 169.17 | 20.64 |
|  |  |  |  |
| Total | 333 | 160.95 | 21.77 |

Table 34
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to Major Field

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | ---: | :--- |
| Non-Social Sciences | 266 | 159.44 | 21.60 |
| Social Sciences |  |  |  |

Note. ${ }^{\text {a }}$ Archeology, Anthropology, Economics, Political Science, Government, and Sociology

Table 35
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors

Grouped According to Time Devoted to Administration

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | :--- | :--- |
| None | 71 | 152.10 | 20.87 |
| $1-10 \%$ | 145 | 162.73 | 19.90 |
| $11-20 \%$ | 64 | 161.86 | 23.88 |
| $21-40 \%$ | 25 | 162.76 | 21.83 |
| $41 \%$ and more | 28 | 169.14 | $22.6 \overline{0}$ |
| Total | 333 | 160.84 | 21.74 |

Table 36
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to Income Earned at the Institution

| Group | Count | Mean | Standard <br> Deviation |
| :---: | :---: | :---: | :---: |
| 20,000 bahts or less | 20 | 165.65 | 21.69 |
| $20.001-25,000$ | 30 | 149.93 | 20.22 |
| $25,001-30,000$ | 49 | 155.27 | 20.76 |
| $30,001-40,000$ | 98 | 162.01 | 23.42 |
| $40,001-50,000$ | 66 | 162.82 | 18.69 |
| 50,001-70,000 | 44 | 163.98 | 20.40 |
| 70,001 or more | 26 | 166.35 | 25.24 |
| Total | 333 | 160.91 | 21.84 |
|  |  |  |  |

Note. 20 bahts $=1$ U.S. dollar

Table 37
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors

Grouped According to Income Earned outside the Institution

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | :--- | :--- |
| 3,000 bahts or less | 178 | 157.47 | 21.95 |
| $3,001-10,000$ | 61 | 164.03 | 21.81 |
| 10,001 or more | 78 | 165.56 | 21.50 |
| Total | 317 | 160.72 | 22.06 |

Note. 20 bahts $=1$ U.S. dollar

Table 38
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to Marital Status

| Group | Count | Mean | Standard <br> Deviation |
| :--- | :---: | :---: | :---: |
| Single | 123 | 157.64 | 21.62 |
| Married | 207 | 163.01 | 21.63 |
| Total | 330 | 161.01 | 21.75 |

Table 39
Frequency Counts, Means, and Standard Deivations of the JDI Scores of University Professors Grouped According to the SRS Scores

| Group | Count | Mean | Standard <br> Deviation |
| :--- | :--- | :--- | :--- |
| Low SRS | 199 | 165.09 | 21.72 |
| High SRS | 136 | 154.68 | 20.44 |
| Total | 335 | 160.86 | 21.79 |

Table 40
Frequency Counts, Means, and Stendard Deviations of the JDI Scores of University Professors Grouped

According to Attitudes toward Banning
Students' Political Activities

| Group | Count | Mean | Standard <br> Deviation |
| :--- | :---: | :---: | :---: |
| Agree very much | 20 | 152.90 | 20.31 |
| Agree on the whole | 33 | 156.09 | 19.49 |
| Agree a little | 78 | 167.32 | 22.18 |
| Disagree a little | 66 | 158.20 | 22.89 |
| Disagree on the whole | 83 | 158.99 | 21.17 |
| Disagree very much | 52 | 163.06 | 21.29 |
|  |  |  | 160.77 |
| Total | 332 |  | 21.85 |

Table 41
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to the Political Effects ${ }^{\text {a }}$

| Group | Count | Mean | Standard <br> Deviation |
| :--- | ---: | ---: | ---: |
| Favorable | 50 | 163.52 | 25.03 |
| No Eifect | 228 | 162.86 | 20.55 |
| Harmful | 51 | 150.45 | 20.73 |
| Total | 329 | 161.04 | 21.73 |

Note. ${ }^{a_{\text {The }}}$ political and social effects during October 14,1973 to October 6, 1976 on their work

Table 42
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to the Dogmatism Scores and Major Field

| Group | Count | Mean | Standard Deviation |
| :---: | :---: | :---: | :---: |
| Low Dogmatic |  |  |  |
| Non-Social Sciences | 86 | 163.12 | 20.28 |
| Low Dogmatic Social Sciences | 26 | 168.65 | 23.09 |
| Medium Dogmatic Non-Social Sciences | 86 | 161.26 | 20.54 |
| Medium Dogmatic Social Sciences | 13 | 170.00 | 15.42 |
| High Dogmatic |  |  |  |
| Non-Social Sciences | 106 | 154.84 | 22.16 |
| High Dogmatic Social Sicences | 16 | 167.56 | 27.81 |
| Total | 333 | 160.92 | 21.46 |

Table 43
Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to the Dogmatism Scores and the SRS Scores

| Group | Count | Mean | Standard <br> Deviation |
| :---: | :---: | :---: | :---: |
| Low Dogmatic <br> Low SRS <br> Low Dogmatic <br> High SRS | 71 | 168.41 | 21.01 |
| Medium Dogmatic <br> Low SRS | 42 | 157.55 | 19.05 |
| Medium Dogmatic <br> High SRS | 69 | 164.78 | 20.68 |
| High Dogmatic <br> Low SRS | 59 | 156.48 | 17.70 |
| High Dogmatic <br> High SRS | 63 | 151.87 | 22.46 |
| Total |  |  |  |

## Table 44

Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped

According to the Dogmatism Scores and the Political Effect ${ }^{\text {a }}$

| Group | Count | Mean | Standard Deviation |
| :---: | :---: | :---: | :---: |
| Low Dogmatic Favorable | 11 | 176.55 | 23.65 |
| Low Dogmatic No Effect | 87 | 164.38 | 19.87 |
| Low Dogmatic Harmful | 13 | 158.62 | 21.41 |
| Medium Dogmatic Favorable | 18 | 164.56 | 24.02 |
| Medium Dogmatic No Effect | 68 | 164.26 | 18.58 |
| Medium Dogmatic Harmful | 11 | 146.91 | 13.23 |
| High Dogmatic Favoranie | 21 | 155.81 | 24.66 |
| High Dogmatic <br> No Effect | 73 | 159.74 | 22.90 |
| High Dogmatic Harmful | 27 | 147.96 | 22.41 |
| Total | 329 | 161.04 | 21.73 |

 October 6,1976 on their work

Frequency Counts, Means, and Standard Deviations of the JDI Scores of University Professors Grouped According to the Dogmatism Scores and the Political Effect ${ }^{\text {a }}$

| Group | Count | Mean | Standard Deviation |
| :---: | :---: | :---: | :---: |
| Low Dogmatic Favorable | 4 | 183.50 | 16.05 |
| Low Dogmatic No Effect | 90 | 164.71 | 20.25 |
| Low Dogmatic. Harmful | 18 | 160.11 | 22.87 |
| Medium Dogmatic Favorable | 13 | 163.69 | 20.48 |
| Medium Dogmatic No Effect | 67 | 162.90 | 18.94 |
| Medium Dogmatic Harmful | 17 | 160.24 | 25.95 |
| High Dogmatic Favorable | 31 | 156.42 | 25.18 |
| High Dogmatic No Effect | 75 | 158.37 | 23.03 |
| High Dogmatic Harmful | 15 | 147.80 | 20.89 |
| Total | 330 | 161.06 | 21.88 |

Note. ${ }^{a}$ The political and social effects after October 6, 1976 to October 20, 1977 on their work

