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WOMEN TEACHERS AND PROFESSIONALISM:  
A SINGAPORE CASE STUDY

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ABSTRACT

This paper explores women teachers' professionalism in Singapore schools. Based on the premise that a woman's professionalism will depend largely on the degree to which she identifies with the family-based role of woman in the home, her level of education and her working experience, five hypotheses in relation to the professional orientation of women teachers in Singapore are put forward. The study hypothesizes that: (1) Women teachers who are married and who have family commitment will be less professionally minded than the single women teachers, (2) the disparity in the professional orientation of women teachers, which is due to marriage will be minimized by high educational attainments and long working experience of the teachers concerned, (3) the higher the educational attainments of the teachers, the higher the professionalism, (4) the longer the service of the teachers, the higher their professionalism, and (5) the higher the teachers' professional orientation, the higher their professional behavior. Postal questionnaires consisting of three parts, viz., bio-data of the respondents, a measure of professional orientation and a measure of professional behavior, are used. The analyses draw on data obtained from two hundred and sixty-six women teachers randomly selected from different junior colleges, primary and secondary schools in Singapore. The findings reveal that marriage, as generally expected, has a significantly adverse effect on women teachers' professionalism. Both education and experience factors are ineffective in moderating the impact marriage has on the professional orientation of women teachers. These two variables are also found unrelated to women teachers' professionalism in Singapore. Finally, the relationship between women teachers' professionalism and their behavior is shown to be positive but low. The study also suggests that women teachers' professionalism can be raised by maintaining a balance between professional and marital commitment on the part of women teachers, focusing on the problems encountered by teachers in schools, strengthening the link between

the University and the schools, establishing a unified professional association and most importantly, cultivating in the teachers a systematic understanding of the ideas of professionalism.

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## INTRODUCTION

The twentieth century has seen an upsurge of professionalism in most Western societies. This has due mainly to advances in science and technology, and to an ever-increasing reliance on specialized knowledge and skills as well as on services rendered by specially trained persons. Idealistic as it is, professionalism, by focussing on the cognitive realm and service ethos of the occupation, is nevertheless in the eyes of many sociologists an important form of work organization, of orientation towards work and above all, a distinctive source of control over work ( Freidson,1971; Johnson, 1972 ).

Owing to its rapidly expanding economics and technology, Singapore has witnessed a similar movement since the end of the last decade. Better skills, qualifications and work attitudes are required of occupational groups; opportunities and incentives are provided by many of the employing bodies to upgrading the skills and services of their employees; the annual National Wages Council awards will soon cease to make way for free collective bargaining between unions and employers in order to encourage better work performance and to promote a sense of collectivity.

In the teaching profession, prominent changes have also been made. Administrative structures at both the Education Ministry and school level have been amended so that teachers can be provided with the necessary professional back-up as well as room for exercising their discretions. The old inspectorial system has been abolished and teachers will from now on be reported and assessed by colleagues who know their work best. The Ministry of Education is also introducing a study loan scheme for serving teachers pursuing degrees in different subject areas at both the local and overseas universities in order to enable them to upgrade their expertise. These changes and policies have all pointed to the determination of the government

to transform the myth of professionalism into part of the work reality.

Given the unprecedented influence of professionalism on the teaching profession, an important question arises: To what extent is this ideology embraced by our teachers, particularly women teachers in Singapore? The present study is intended for answering this question.

I have chosen women teachers as the basis of my study for three reasons:

Firstly, Singapore is a merito-cratic society in which personal advancement as well as betterment of society depend, to a very large extent, on education. As the Deputy Prime Minister, Dr. Goh Keng Swee points out, "...education is a powerful vehicle of social mobility."(1) Not only is education the foundation of all professions, the quality of which has a direct bearing on them, it is also a key to our precious human resources. As the backbone of the education system, teachers bear the responsibility of developing human potential and of producing the types of future citizens the Republic needs. Their work attitude is therefore a decisive factor to the realization of these objectives.

Secondly, like many Western countries, our education is characterized by a preponderance of women teachers in the service. 60.97 per cent of the teachers serving in schools in Singapore are women. Of them, 58.12 per cent are married(2). How these teachers weigh the new work principle which is believed by many of the Western critics to be incompatible with the orthodox feminine role of women is therefore of great consequence to the raising of the standards and status of the profession, which, in turn, have a bearing on the well-being of our young and of society at large.

Finally, while the professional orientation of women teachers is a hotly debated issue in the West, it remains unexplored in local educational research. It is hoped that the present study would give an initial picture on the professional orientation of our women tea-

chers, hence, providing a base for future studies and action in this field.

This paper is developed in six parts: The paper will begin with a detailed discussion on the characteristics of professionalism as envisaged by both its Western and local advocates. A good understanding of these characteristics is deemed essential for the present investigation. The second chapter will offer a review of literature on the work orientation of teachers in general and of women teachers in particular. Hypotheses based on the review will be put forward in the following chapter and will be empirically tested. The fourth chapter will deal with the methodology employed in the study, and the results will be presented in the next chapter. Finally, discussion on the findings will be given.

## CHAPTER ONE

### PROFESSIONALISM: THEORETICAL CONSIDERATIONS

Professionalism is a composite phenomenon which, far from being fixed and static, varies with time as well as with the cultures and socio-economic developments of societies. Despite some negative viewpoints ascribed to professionalism by such writers as Goldner and Ritti(1967), Pemberston and Boreham(1976) and Illich(1977), the assumption that professionalism is in various ways beneficial to society is generally agreed upon. Tawney(1948), for example, sees professionalism as the major force capable of subjugating rampant individualism to the needs of the community in a functional society. Carr-Saunders and Wilson(1964) regard the "modes of life", "habits of thought" and "standards of judgment" engendered by the ideology as "centres of resistance to crude forces which threaten steady and peaceful evolution of society."(3). Lynn(1964) further affirms this stabilizing function of professionalism by pointing out that the ideology operates not only at a national but also at an international level, for it provides a base for international communities, thereby, helping to maintain world order. Becker(1962) and Halmos(1973) similarly treat professionalism as the source of inspiration which, though it may not exist in reality, acts to guide the efforts of occupational groups aspiring to function in a morally praiseworthy manner. Freidson(1971) and Elliott(1972), on the other hand, see professionalism as a method through which specialized knowledge is developed and utilized; and through which specialized functions within the social system are managed.

Significant and positive implications of professionalism for education in Singapore have also been speculated: Firstly, the ideology helps raise the status and quality of education by cultivating commitment on the part of our teachers to the ideals of service

to the school and community, and to the quest for professional self-improvement. Such commitment, according to the Minister for Trade and Industry, Dr. Tony Tan, is the pre-requisite for education to be recognized as a full-fledged profession by society as is the case with medicine, law and engineering(4). This recognition is, in turn, of paramount importance to our education in view of the recruitment of quality members to the field to alleviate the present teacher shortage problem and the promotion of the morale and confidence of our teachers in carrying out their tasks. Secondly, the ideology is seen as providing a source of strength that guides the behavior of the teachers at work. This function of professionalism is well illustrated by Sia(1981) using the following analogy:

" In the face of growing frustration and disappointment, we must never become so embittered as to lose sight of our high ideals and expectations, for while ideals like stars may seem distant and unattainable, they are absolutely necessary to steer the ship through rough seas. This must be the hallmark of the true professional. "(5).

Given the potential force of professionalism in education, what are its unique features then?

A voluminous literature dating back to the beginning of this century has been devoted to the answer to this question(Flexner,1915; Carr-Saunders and Wilson,1964; Lieberman,1956; Greenwood,1957; Gross,1958; Wilensky,1964; Hall,1968; Goode,1969; Moore,1970; Elliott,1972; Larson,1977; Hoyle,1980.). As a result, an indivisible consensus on any single inventory of the characteristics of professionalism is unlikely to be arrived at. However, a careful review of the literature will give substantial agreement about the general attributes of professionalism.

Professionalism must be scrutinized from two aspects: The structure of the occupation and the attitude held by its members. As Hall(1968) points out, these two levels of professionalism should not be confused, for these do not necessarily vary together. The present

chapter will consider at length the attributes of the ideology from both the structural and attitudinal aspects. In so doing, it also takes into consideration the degree to which teaching in Singapore meets these criteria.

#### The Structural Model:

It is generally believed that as a profession, the occupational group must demonstrate certain professional traits which distinguish it from other trades. Cited below are six criteria commonly used by writers mentioned above in studying professions.

*\* A profession performs a unique, definite and essential social service:*

The practice of the profession is limited exclusively to the practitioners such as in the case of medicine, surgery and drug prescribing are tasks performed by doctors only. The scope of the professional service must be definite and unambiguous, and the service thus rendered must be regarded by society at large as indispensable to humanity.

There can be little doubt that education in Singapore fully meets this criterion. Schools are still considered the only proper place for the dissemination of systematic knowledge and for the development of human potential. The recent change in our education policy has further accentuated the important role played by our school teachers in influencing the social mobility and quality of our younger generations. The new education system aims at providing education in accordance with the abilities and aptitudes of the students so that human wastage could be minimized as every individual will be trained to the maximum of their capacity. The success of this new system depends, to a very large degree, on the professional skills, dedication and personal example of the teachers as they are the ones charged directly with the implementation of the system.

\* *A profession is founded upon a systematic body of knowledge:*

A systematic body of knowledge is believed to be an important feature in distinguishing the profession from the non-profession, for it constitutes the repertoire of the professional's competence in the handling of the client's problem; hence, the source of power. The knowledge base of teaching includes both subject-matter knowledge and a knowledge of educational theory. Whereas the former places emphasis on the depth of the subject taught by the teacher, which could be acquired only through higher education, the latter stresses the primary disciplines such as philosophy, sociology and psychology in education as well as the pedagogical skills mastered during the professional training. Both these two kinds of knowledge are of equal importance in assessing the competence of the teacher, for teaching effectiveness could not be achieved without the latter, while the ignorance of the former could only lead to what Neal(1976) has termed, "the dissemination of barbarism with skill"(6).

These two aspects of the teaching foundation are fully recognized by education in Singapore. This is evidenced by the determination of and actions adopted by the government to staff our schools with graduate teachers, and by efforts put forward by such organizations as the Institute of Education, the Ministry of Education, the Singapore Teachers' Union and the Regional Language Centre to carry out research and to provide training in order to improve the knowledge base of our teachers.

\* *A profession requires a lengthy period of academic and practical training:*

A protracted period of training, both intellectual and practical, is deemed essential because the professional could not be fully socialized into the norms and cultures of the profession and could not master specialized knowledge and skills



to the required extent if he/she did not spend a lengthy period with the professional school. The length of training received by the professional also carries important connotations for society at large, for this is the stamp of quality service upon which it depends.

Since July, 1980, the formerly part-time preservice teacher programme has been amended to provide a full-time training for novices. The period that a teacher trainee now spends with the Institute is 1-1½ years for a university degree holder, 2-3 years for a G.C.E.'A' level candidate and 3 years for a G.C.E.'O' level candidate. The teacher training programmes, which are largely provided by the Institute of Education, place emphasis not only on the theoretical aspects of teaching and the practical experience of the student teachers, but also on the continual learning of the practising teachers.

\* *A formalized professional association:*

It is generally believed that as a profession, mutual identification of distinctly occupational interests among members always leads to some form of professional association. The function of a professional association is three-fold: Firstly, it provides a base for the collaborating identity of its members. Secondly, it provides some mechanism of control to maintain standards of performance and over access to the occupation. Finally, it protects and promotes the interests of its members. This very last function of the professional organization, however, should not overshadow all others in importance or the service ethos of the profession would be undermined.

As education in Singapore is a public enterprise and the control of which is vested in the government, the teachers' unions have little say on matters concerning the recruitment, promotion and firing of teachers; nor have they any profound influence on tea-

chers' behavior, except in the case of granting membership to the teachers. The main function of the unions, apart from providing a vehicle through which teachers' opinions are voiced and through which the basic interests of teachers are secured, is seen lying in the auxiliary form of assistance they render to the whole education service. To cite an example, the follow-up study carried out by members of the Singapore Teachers' Union after the implementation of the new education system to gather teachers' views on the recent educational development is seen as supplying the Ministry with the useful feedback on which subsequent government action could be based.

\* *A profession has a code of ethics:*

In the advanced professions, professional standards are usually embodied in and enforced through codes of ethics. It is by these codes of ethics, the professional's behavior is to be restricted, and by which his/her morals are to be strengthened.

A code of ethics is also considered necessary to the teaching profession. As outlined in one of the workshops organized by the Singapore Teachers' Union, the conduct of a professional (the teacher in this case) must "confirm to the Code of Ethics for the profession, whether this code is tacit or spelt out in print. Those who violate this code can be summarily disciplined"(7). However, the ethical code in education lacks the power found in those labelled by the established professions such as medicine and law. Since education does not have a professionally controlled licensing body, such a code can only act as a guide, not an enforcing strength, to the teacher's conduct.

\* *A profession has a high degree of autonomy:*

Autonomy is an important professional attribute in view of the esoteric knowledge claimed by the profession, the specialized training received by its members and the nature of service which

is beyond the layman's grasp. The notion of professional autonomy can be understood from two dimensions: The autonomy enjoyed by the individual professional and that by the occupational group as a whole. The former refers to the freedom of the individual professional to make decision and to exercise judgment in the interest of his/her clients whereas the latter points to the autonomous operation of the profession as a whole.

Teachers in Singapore seem to enjoy autonomy of these two kinds, but of a very different form. Education in Singapore has a long history of centralization; educational plans and innovations are, more often than not, initiated from the upper echelon of the hierarchy so that education can be integrated with the overall economic and social development of the nation. This is an important fact in view of the nation's strategic position in the region and of its scarce resources. However, it is also being recognized that the basic teaching organizational unit is the school, and that teachers know the problems of their students better than the Ministry officers. Opinions of the school staff are therefore often sought after by the Headquarters in solving practical problems. The professional power of teachers is justified here by their acting as advisers and experts in the context of government decision-making rather than by their autonomy in making educational policy. On the other hand, the power of an individual teacher is all-prevailing in class. He/she enjoys absolute autonomy in the selection of pedagogical methods, classroom management strategies and in influencing the course of learning. Teachers also possess a special kind of power, which, to a certain extent, can be equated with that of the most prestigious professionals. They determine the future of the students by promoting or demoting their charges or by channelling them into different ability groups.

#### The Attitudinal Model:

The attitudes held by members are as important in defining professions as the structural dimension discussed above. The fol-

lowing criteria are believed to adequately depict the attitude of a true professional.

\* *A professional must be competently oriented:*

Since members of the society believe in and relying on the esoteric knowledge possessed by the professional in solving their daily problems, a professional should always feel obliged to foster his/her expertise and to find better ways to fulfil his/her responsibilities.

In the teaching profession in Singapore, that teachers should be constantly upgrading and updating their competence through courses, seminars and conferences pertaining to teaching and learning is a particularly important attitude to be instilled in our teachers in view of the rapid and successive changes that take place in our education system. As Sia(1979) points out: "Not to progress professionally is to regress...A teacher can never truly teach unless he is still learning himself."(8)

\* *A professional must have a sense of calling to the field:*

A professional places greater emphasis on intrinsic satisfaction derived from his work, rather than on monetary rewards or other benefits offered to him externally. This intrinsic value, which arises from the exercise of specialized knowledge and skill, on the other hand, engenders a sense of devotion, hence, a lifelong commitment to work on the part of the professional.

This sense of commitment is particularly cited by the Minister for Trade and Industry, Dr. Tony Tan, as a desirable attitude which outweighs others in the maintenance of a high level of professionalism in teaching. As he indicates, "the teacher who displays integrity and dedication will constantly want to improve himself by maintaining high standards of personal and professional conduct. He will continue

to grow professionally through reading, studying and actively participating in professional activities. He will apply continual self-evaluation to assess how he has conducted himself and managed his school work."(9). A strong sense of commitment is also evidenced by the teacher's belief that he/she should love and take pride in his/her work.

*\* A professional must demonstrate a belief in service to the public:*

A professional must believe that his service is both indispensable and beneficial to society. Snizek(1972) suggests that "since the general public has difficulty believing in the indispensability of services performed by some occupations, practitioners are often slow to develop this belief. Therefore, the degree to which they do so becomes"an important attitude component for measuring professionalism (10). The service orientation of the professional can also be defined as the norm that decisions made by the professional should be based on the needs of the clients, rather than on the material interest and needs of the professional himself.

When applied to education in Singapore, this would mean that teachers should act not in the interests of the employing authority and of themselves, but in those of the students. Thus, a strong sense of responsibility to their students is a virtue that our teachers need to cultivate if they are to become full-fledged professionals.

*\* A professional must use the professional organization as a major referent:*

Both the formal and informal professional organizations should always be treated by a professional as an important source of ideas and judgments in his work. The professional looks to his professional colleagues for cues and insights to

guide his action, and through identifying closely with one another, helps uphold the values and norms of the profession and maintain the standards of performance. This "colleague consciousness"(Gross,1958) is usually manifested in the form of membership possessed by the professional in a strong professional association and by his participation in such professional activities as conferences, meetings and so on.

A colleague orientation is deemed necessary for our teachers if they are to strive towards professionalism. They need to support one another, both in thinking and in action, and to work together for the good of their students and their profession.

\* *A professional must have a strong sense of autonomy:*

A professional must demonstrate a positive attitude towards autonomous practice, that is, a willingness, a feeling of freedom and competence to exercise discretions. Any decision and judgment made by the professional with regard to his work should not be influenced by pressures imposed on him by the laity, including the employing body, the clients, as well as non-members of the profession.

The recent change of educational and administrative direction in Singapore has provided our teachers and principals with greater discretionary power in the running of the schools. This is, without doubt, a challenge; a challenge which will contribute to the self-esteem of the teachers and to the raising of the status of the profession, and which must be accepted by the teachers with a good grace and confidence.

This chapter has delineated both the structural and attitudinal characteristics of a profession. Though importance of these two aspects of the profession is being recognized, for teachers do not function in the abstract, special attention has, nevertheless, been

given to the latter. The following chapter will give a brief review of studies on the work attitudes of teachers in general and of women teachers in particular.

## CHAPTER TWO

### TEACHERS AND THEIR PROFESSIONAL ORIENTATIONS: A REVIEW

The term "orientation", according to Corwin(1970), refers to "a person's understanding of his relationship to a selected part of his total environment.... Orientations are part of a value system. As such they are normative, representing a person's beliefs about what ought to occur."(11). The orientations of teachers are a crucial aspect to study in exploring teaching professionalism, for it is believed that the manner in which an individual views his/her work comprises an important part of his/her practice(Hall,1968). Special emphasis has also been given to the attitude of the teachers in promoting the status and quality of education in Singapore. Dr. Tony Tan(1980), for example, stresses that if teaching is to be admitted to the realm of the established professions, and that if teachers' professional standards and status are to be improved, teachers must then cultivate an attitude of professionalism.

In this chapter, two tasks are being attempted. The first is to offer a synthesis of literature on the professional orientation of teachers in general and the second is to present a more comprehensive picture on attitudes of women teachers towards their work in particular.

#### A General Perspective:

Writers studying teacher professionalism used to fall back on the criteria discussed in the previous chapter for their yardstick. Weight is assigned to these criteria unevenly, based upon the emphasis of the individual writers.



Lieberman(1956), in analysing the teaching profession, attributes its lack of autonomy to the reluctance of teachers to resist encroachment upon their practice, to assume responsibilities and their low inclination to power. He criticises: "Most teachers fail to see any relationship between their own lack of power and their inability to professionalize education. They turn instead to utopian and unrealistic counsels.... All too often teachers give up what little power they have and rely instead upon superficial expressions of support from others."(12). He also claims that teachers have no machinery and power to enforce ethical conduct of one another, and that they have lower academic attainments when contrasted with members of other established professions.

Colombotos(1962) investigates the professional orientations of teachers by using a scale based on the teacher's emphasis on technical competence, autonomy and the service ideal. He reports that women teachers are more professionally oriented than male teachers, that male teachers teaching academic subjects are more professionally oriented than their counterparts in non-academic areas, and that teachers' professionalism is positively correlated with the educational achievement of and advanced training received by the teachers. The results of the investigation also show that professional male teachers are more likely to participate in activities organized by the American Federation of Teachers and that professional orientations of the teachers are affected by the school's climate(13).

Peabody's study(1964) shows that elementary school teachers stress their responsibility to clients and rely more upon authority based on professional competence. The professional orientations of teachers are also found to be related to the teaching experience of the individual. Less experienced teachers are more likely to be acquiescence to authority when confronted with conflict(14).

Similar findings are reported by Jackson(1968). Teachers in his study express great hostility to outsiders' evaluations of their classroom performance and show full confidence in themselves in judging their own work.

Hall(1968), in his study of the structural and attitudinal characteristics of professionalism manifested by a variety of occupational groups, reports that teachers score high on the service ideal dimension and demonstrate, though somewhat weaker, a sense of calling to the field. He also confirms that the attitudes measured are quite strongly associated with behavior.

Hall's findings are supported by Lortie(1969,75). Data gathered from teachers in the Dade County Elementary School and Five Towns show that a vast majority of teachers derive their major work satisfaction from student achievement. When asked about the dispensation of additional time, 43.8 per cent of the teachers at Dade County School answer that they would spend it on "preparing lessons, reading and studying, and reviewing students' work"(15). The findings have led Lortie to argue, as opposed to Lieberman's contention, that the source of teachers' authority lies in their service orientation, for it renders them relatively insensitive to and independent of extrinsic benefits controlled by the administrators, hence, changing the superordinate-subordinate relationship between them. The service ideal also enables the teachers to have more initiative with regard to professional matters. However, an overstatement on the orientation towards teaching task and students would certainly undermine teachers' participations in other school-wide affairs.

Corwin(1970) administers a sixteen item Professional Orientation Scale to groups of secondary school teachers, probing their attitudes towards their profession, students, colleagues, competence and decision-making authority. The investigation reveals that teachers, as a whole, strongly believe that they should be given free scope to do what is best for the students, that they should look to their own professional group for cues with respect to the best educational practices, that the competence of the professional should be based on specialized knowledge, and that they should have authority in making educational decisions. Statistics also show that professional orientations of the teachers do not differ markedly between the sexes or different age groups. At the same time, teachers in Corwin's study also report a eagerness to comply with their superiors.

The attitudinal scale developed by Corwin is also used by Robinson in studying teachers and principals in twenty-nine schools. As a result, he finds that teachers with a university degree are collectively more professionally oriented than those without degrees. Teachers' professional scores are also found to be positively and significantly related to the emphasis on specialization, technical competence and impersonality (16).

Shaw(1971), in his study on fifty members of a teachers' college, tests their orientations towards students, colleagues, competence and autonomy. He reports that 66.67 per cent of the lecturers surveyed score within the stipulated limits of high professional orientation while the remaining subjects distribute themselves along the medium range scores. The overall professional orientation mean score is also high. More than two-thirds of the subjects display high and medium professional behavior and a great majority of them (95.56%) rate themselves within the range for medium and high professionalism. Interestingly, the study reports no relationship between professional orientations and the actual behavior of the professionals.

Studies in the area of teacher professionalism are rare in Singapore. A recent survey(1980) conducted by the Singapore Teachers' Union examines teachers' professionalism at length. The survey reports that teachers in Singapore tend to hold a passive attitude towards their professional responsibilities and decision making authority. These teachers may not be unprofessional, only they are aware of the constraints imposed on their professional role by the system. A majority of them agree that the Ministry is still the real decision-maker and that miscellaneous non-professional duties render it impossible for them to attend to the needs of the students. Not many of these teachers are found having great confidence in their senior colleagues as professional matters are concerned. It is reported that 52.7 per cent of the teachers doubt that their senior assistant teachers would give good advice on how to cope with various classroom problems, and that only 37 per cent find their senior subject teachers helpful. However, it is also found that a greater portion

of these teachers believe that they can improve their classroom expertise through informal sharing as the need arises. The survey also shows that, on the whole, teachers are competently oriented. 75.8 per cent of the respondents appreciate more courses which answer to the needs of the education system and 61.5 per cent of them have actually attended inservice courses in the previous three years. When asked of the reasons for attending these courses, knowledge, new teaching methods and professional obligation are cited most often. Finally, teachers are reported being resentful about their being evaluated by persons who lack special knowledge in relation to their teaching field.

The review in this section shows that school teachers display different degrees of professionalism, which are possibly influenced by a large variety of factors, ranging from the gender of the teacher, the subject taught in school to the teacher's educational level, teaching experience as well as the education system in which the teacher functions. In the next section, women's professional orientations, particularly women teachers', will be focussed upon.

#### Women Teachers and Professionalism:

It is an indisputable fact that women make up a large proportion of the work force in education. However, it is of little consensus among writers as to its impact on the full professionalization of the occupation. Numerous theoretical and empirical studies have been devoted to studying women's orientations towards their professions during the last two decades, and these will be reviewed in this section in the hope of casting some light on questions pertaining to the present investigation.

An ingrained prejudice favouring the familistic definitions of woman's role in society and the docile, submissive image of woman has found its expression in some of the early philosophical works of both the East and the West. Rousseau and Comte, for examples, believe that

women should be detached from all outside work, for their responsibility and contribution lie exclusively in the home. In China, the doctrine of Confucius has likewise socialized women into inferior cultural norms, urging them to look to their male counterparts as the source of guidance and authority. The domestication of woman and their weak orientation towards autonomy have led writers such as Caplow(1954), Etzioni(1969), Simpson and Simpson(1969) into believing that professionalization of education is all but impossible in view of the over-whelming majority of women in the profession. Caplow points out that the intermittent work pattern characteristic of the predominantly female professions has adverse effects on both the professional advancement of the teachers as well as on the development of occupational solidarity. The passive attitudes of women teachers towards authority, on the other hand, not only prevent them from taking up important supervisory positions in schools, but also limit their leadership ability for negotiation and collective bargaining. Etzioni(1969) also cites the lack of professional authority on the part of women teachers as an obstacle to professionalizing education. He notes:

" Despite the effects of emancipation, women on the average are more amenable to administrative control than men. It seems that on the average women are also less conscious of organizational status and more submissive in this context than men." (17)

Simpson and Simpson(1969) claim that since women's primary attachment is to the family, they are therefore less intrinsically committed to work and less likely to maintain a high level of specialized knowledge. They also tend to readily follow directives from above. Their study on both men and women teachers confirms these views.

For other writers meditating in the same vein, similar conclusions have been reached. Lieberman(1956), for example, contends that the interests of women teachers lie in marriage and a home and it is unlikely that they will commit themselves to the raising of professional standards and to the improving of teaching conditions. Kahlen

and Johnson(1952) ask a group of single and married women teachers as well as married men teachers what they would most like to be doing ten years later, and as a result, find that whereas about three-fourths of the single and married women teachers under thirty years of age show a desire to become a housewife, the percentage of women teachers, both single and married, expressing the like desire decreases in older age group. Analysis of the male teachers' responses shows a contrasting result in which less than 25 per cent of the male respondents at any age level wish to leave teaching for other jobs(18). Mason(1961), in studying first year men and women teachers, reports that only 16 per cent of the women teachers expect to remain in the service until retirement. Among those who wish to leave education, 80 per cent give family reasons for their withdrawal. However, 58 per cent of them express the wish to return at a later stage(19). He also finds that first year women teachers are less likely than their male colleagues to exercise leadership. Rosenbery(1957) also claims that although teaching exhibits certain intrinsic values such as services to people and humanitarian worth which appeal strongly to women, these are insufficient to result in strong professional commitment on the part of women teachers, for they can always find their paths to these goals through family life(20). Of the family factors deterring women professionals from devoting to their work, the number and age of children are found to have great influence(21).

Doubts have also been raised concerning the identification of women teachers with the professional community and their contribution to it. Whereas the former refers to the professional's adherence to norms and attitudes characterizing the profession, and to their keeping up with the rapidly expanding body of knowledge and the standard of practice through participating in both the formal and informal networks of the profession, the latter is justified by the publication of books and articles or presentation of papers by the professional in relation to her field. Simpson and Simpson(1969), for examples, criticise that women teachers have a weak sense of professional community. Findings of their study show that women teachers spend as much time with their colleagues as men teachers do, they are,

however, less inclined than men to use professional colleagues as a reference group. Their women respondents indicate that opinion of someone other than their fellow teachers has great influences over their professional self-evaluation and behavior. Epstein(1970,71) claims that women professionals are to a lesser extent involved in collegial networks. Their internalized inferior feeling results not only in their exclusion from the professional circles of their male counterparts, but also in the expulsion of their own sex. She also comments that women professionals are relatively unproductive in terms of the number of books and articles published. Theodore(1971) discounts the participation of married women professionals in professional meetings and other social functions outside the work organization on the ground of their lack of time. A survey conducted by New Zealand Educational Institute(1978) also finds that women teachers are apathetic towards professional meetings(22).

The foregoing findings, however, do not necessarily hold true for many other researchers studying the orientation of women professionals towards work. Haller and Rosenmayr(1971), for examples, suggest that marriage and motherhood may not necessarily best account for the low work commitment of women professionals. Their study indicates that a long working experience, particularly in concurrence with family obligations, creates strong work commitment for professional women. By citing the work of Fogarty, Rapport and Rapport(1971), they also rectify the falsified idea that women without children are more work committed than working mothers, and argue that the contrary is the case. Constantina Safilios-Rothschild(1971), after reviewing the studies of Fuchs(1970) and Szabady(1970), concludes that work commitment of women does not necessarily correlate with their roles in family, it is rather determined by the educational level of the person involved and by the degree of meaning, and fulfilment of creative, independence and purposefulness needs provided by the job.

The view that education attainments are a determinant of the professional orientation of women is further supported by a number of other studies. For example, Theodore(1971) reports that commitment to

work, in terms of the length of time the woman professional plans to spend on work, increases with the amount of higher education beyond the college degree. The study of Wong(1975) shows that professional women holding a university degree give more weight to the intrinsic satisfactions derived from their work and are more likely than their non-graduate counterparts to combine marriage and work. Silverstone and Ward(1980) also point out that the degree to which the woman professional identifies with her profession and enjoys autonomy is positively associated with the education and training received by her. In studying women Ph.D, Simon, Clark and Galway(1967) report that married women professionals, with or without children, publish more books and articles than unmarried ones. They also outrival their male counterparts in this respect. The findings also indicate that as many married and unmarried women as men Ph.D hold membership in at least one professional organization and subscribe to at least one professional journal, and that women respondents in education are more inclined than those in other fields to participating in activities of the professional organization.

Feldman(1973), on the other hand, defends the married women professionals by proclaiming that although family is placed ahead of career by both single and married women, married women are more likely than their single counterparts to exhibit work commitment, for while marriage may still be a major goal which predominates over other objectives until it is achieved for single women, support from the husband may allow the working mother greater flexibility in allocating her time and attention. A similar point of view was also expressed by Weil(1961) two decades ago.

Recent studies also give evidence of a positive attitude of women, particularly women in education, towards work. O'Donnell and Andersen (1978), for examples, study women students at Washington State University and find that although most of the women respondents expect conflicts between marriage and career responsibilities to arise, they nevertheless express determination to pursue a career over the objections of a significant male in their lives. The role of the conventional house-



wife is neither desired nor anticipated by these women. Ward(1980), in studying women teachers in Singapore, Malaysia and Thailand, finds that teachers in her sample are more likely to combine family with career, to seek personal fulfilment as well as professional development(23). The study of Kelsall(1980) shows that women's dropout rate in education is somewhat smaller than that of men. 90 per cent stability for women teachers is reported. The findings also reveal that though women teachers in the sample place emphasis on the nurturant and social-work aspect of the profession, they nevertheless express discontent in respect of opportunities for intellectual development and opportunities to rise to the top. They also regard their work unfavourably in relation to the scope it offers for initiative and freedom to develop one's ideas(24).

It is understood from the foregoing review that factors impinging upon the work orientation of women teachers are multi-faceted in nature. Women teachers' professionalism ebbs and flows at times depending on the social contexts in which the teacher functions, her marital commitment as well as many other elements such as the educational level of the teacher, her work experience and satisfaction she derives from her job. The following chapter will take into consideration these factors in order to hypothesize the professional orientation of women teachers in Singapore.

## CHAPTER THREE

### HYPOTHESES

As the literature reviewed in the previous chapter has shown, the study of women teachers' orientation towards their profession is complex and contentious at best. The crux of the problem seems to lie with the coexistence of old and new values regarding the role and identity of women in the contemporary society and the ambivalence thus arising from their dual responsibilities and perception. The socialization of women, on the one hand, has led them into defining their success and satisfactions in terms of marriage and maternity as pointed out by such writers as Caplow(1954), Etzioni(1969), Simpson and Simpson(1969); the emerging reality, on the other, has urged them to look beyond the family boundary to work for self-actualization and self-fulfilment(Epstein,1975; Feinstein,1979; Bardwick,1980). The latter is seen gaining in strength with an increasing amount of women holding a university degree and participating in economic activities (Simon,et al,1967; Wong,1975; O'Donnell and Andersen,1978; Silverstone and Ward,1980). It is therefore concluded from the above observations that any evaluation of women teachers' professional orientation based on a unidimensional presumption which emphasizes the traditional or modern role of women to the exclusion of the other, is both misleading and impractical, for in spite of the growing momentum of women's movement of today, the stereotyped norm with respect to the role allocations between men and women in society still persists and remains partially viable, the negligence of which will result in unrealistic expectations. By the same token, to overlook the effects of other impinging factors such as education and working experience on women's conception of themselves and of the total environment is to disregard the evolving phenomena of society and to lag behind the time. This position will be taken up by the present chapter in hypothesizing the professional orientation of women teachers in Singapore.

Three sets of hypotheses are put forward in this chapter. The first set of hypotheses ( H.1, H.2 ) is concerned with the effect marriage has on women teachers' professional orientation, and the degree to which this effect could be moderated by such factors as education and teaching experience. The second set ( H.3, H.4 ) looks at the role educational attainments and teaching experiences plays in promoting teaching professionalism of women teachers. The third set ( H.5 ) deals with the relationship between professional orientations and professional behavior of the teachers.

These three sets of hypotheses are dealt with respectively below:

The professional orientation of women teachers is contingent upon their homemaker role:

*H.1. Professionalism scores will vary with the marital status of women teachers: Single women teachers will display higher professionalism.*

It is an orthodox belief that work and marriage are two incompatible goals to women, for both these goals require a considerable amount of time and energy. Having internalized the long-standing social value which attributes women's prime gratifications and contributions to their home, marriage has at once defined the boundaries of occupational involvement for women. The extent to which the professional role of women teachers is fulfilled is highly contingent upon their family situations, other factors unconsidered. For example, an unbroken service and a continuous participation in inservice courses after school hours will depend greatly on support given by the husband, domestic helps or relatives. Opportunities for these married women teachers to be involved in collegial networks or extra student programmes designed to stimulate student growth and learning fluctuate with the house-keeping tasks and other family obligations held important for the teacher involved. Single women teachers, on the other

hand, are free from these domestic worries. The first assumption advanced in the present paper is, therefore, that marriage is negatively associated with the professional orientation of women teachers, other elements unconsidered. This assumption will be tested by comparing the professionalism scores of the single and married women teachers, and it will be supported if the professionalism score of the single women teachers is significantly higher than that of the married women teachers.

Women teachers' professionalism is also a function of educational attainments and teaching experiences:

*H.2. Differences in professionalism due to differences in marital status of the women teachers will be moderated by the educational attainments and teaching experience of the teachers.*

Thanks to the opening up of opportunities for women in tertiary education and in the work-place, a new reality is emerging today in which women no longer feel comfortable and satisfied with their unidimensional role as homemaker. While glorifying their traditional role in the family, they are, at the same time, aware of the fact that they are independent persons with responsibilities to themselves as well as to others. Free access to higher education and a long working history have widened their cultural and social perspectives and enable them to acquire new insights unavailable in their socialization process, hence, altering their understanding of their relationship to the total environment. It is thus assumed that by taking into account the educational attainments and teaching experience of women teachers, differences in their professional orientations, which are associated with the marriage factor will be mitigated. This hypothesis will be sustained if differences between the professionalism scores of single and married women teachers occur only at certain levels of the education and experience factors, that is, if an ordinal interaction exists between the three variables, marital status, education and experience.

The educational level of the women teacher determines her degree of professionalism:

*H.3. The higher the educational attainments, the higher the professionalism.*

Educational attainments are assumed to be a significant factor in influencing the women teachers' orientation towards their profession. The higher the education received by the teachers, the greater likelihood of career continuity, for they are the ones suffering higher costs of opportunities lost if they were to stop working, the greater the likelihood that teachers would stress personal and psychological motives rather than economic motive for staying in the profession, for special skills and subject knowledge are emphasized as a result of their education and training. Higher education also creates a demand for autonomous practice by the teacher, for few colleagues share her field, let alone the administrators. The above reasoning will be tested by comparing the professionalism scores of three groups of teachers, viz., post-graduate, graduate, and non-graduate teachers, and it will be supported if the professionalism score of the graduate teachers is significantly higher than that of the non-graduate teachers, and if the score of the post-graduate teachers is significantly higher than that of their graduate counterparts.

The length of service in the school determines the degree of the woman teacher's professionalism:

*H.4. The longer the service, the higher the professionalism.*

It is assumed that teaching experience, in terms of the length of service rendered by the teacher to the school has a direct bearing on the professional orientation of the woman teacher. A long service would probably generate in the teacher a strong identification with her profession. It would be likely to enhance a feeling of esteem and competence on the part of the teacher, hence, enabling her to resist encroachment made upon her authority by the outer environment.

Teachers who have a long service record also tend to combine marriage and work. In order to test this assumption, professionalism scores of teachers with different experiences will be compared. The assumption will be supported if teachers in the medium service group (3-9 years) score significantly higher than the beginning teachers (1-2 years), and if teachers in the long service group (ten years and above) score significantly higher than their colleagues in the medium service group.

Professional behavior is a function of professional orientation:

*H.5. The higher the professional orientation, the higher the professional behavior.*

Professional behavior here refers to the actual performance of teachers in schools and their involvement in activities relating to their professional role outside schools. The assumption in this paper is that there is some correspondence between the teachers' attitudes towards their work and their actual behavior at work, that as professionals, teachers will practise what they believe and conceptualize in a consistent manner. Confirmation of this assumption will be demonstrated by a positive relationship between the professionalism scores and self-reported behavior of the teachers.

## CHAPTER FOUR

### METHODOLOGY

This chapter presents details of the teachers, instruments employed in the study, the several procedures in the collection of data, and the statistical treatment of the data.

#### Sample:

Education can be regarded as a profession containing different strata: University teachers, educational administrators, school teachers and teachers attached to the Ministry Headquarters for special purposes. All of them are held under a common name, but display diverse interests, identities, and perform different functions. The present investigation has limited its scope of study to women school teachers only in order to reduce the degree of heterogeneity due to occupational stratification within the sample. Principals, vice-principals and relief teachers were also excluded from the study for this very reason. The ethnic background of the teachers was given attention in the collection of data in view of the multi-racial and multi-lingual characteristics of Singaporean society, and only teachers using either Chinese or English as a teaching medium were considered. Selection of sample was also based on other criteria in line with the theoretical orientations of this study. Only single and married women teachers were used, and these two groups of teachers were subdivided into three categories, viz., post-graduates, graduates and non-graduates with three levels of teaching experience each. These were: Beginning teachers with one to two years teaching experience, teachers with three to nine years experience and those with a long working history, i.e. ten years and above.

Eighteen lists of teachers answering to these research require-

ments respectively were produced by the Computer Service Branch of the Ministry of Education in Singapore. The teacher sample was then randomly selected from these lists and assigned to the eighteen sub-groups accordingly. A total of three hundred and twenty-four teachers from fifty-seven primary schools, one hundred and four secondary schools and eight junior colleges in Singapore were drawn, as a result. Only two hundred and sixty-six subjects were eventually used.

Though attempts have been made to obtain an unbiased sample by manipulating the language medium used by the teachers, their academic and professional qualifications, and their teaching experience, by randomly assigning teachers to the appropriate categories and by selecting teachers from as many schools as possible, there are still some elements, known and unknown, exceeding the control of this study, which might influence the response of the teachers. For example, the climate of the school, the conditions under which the teacher responds to the survey, and the manner in which she deals with it, as well as the degree to which she is concerned with the after-effects of her response. All these are important factors which one should bear in mind when interpreting the findings.

#### Instrumentation:

The survey was carried out by means of questionnaires administered to teachers. The structure of the questionnaire was based on those used by Hall(1968), Corwin(1970) and Shaw(1971), and modified to suit the unique conditions in Singapore. The questionnaire consisted of three parts: Bio-data of the respondents, a measure of professional orientation and a measure of professional behavior. These are dealt with in turn below. A complete set of these questionnaires is reproduced in Appendix A. A Chinese version of this questionnaire was also available for the use of the Chinese-stream non-graduate teachers, and this is also reproduced in Appendix A.



\* Bio-data of the respondents:

The first section of the questionnaire collected information on the respondents, which included age, marital status of the respondent, number and age of her offspring if any, her academic and professional qualifications, the level she taught in the school and the length of her service. This section provides a basic understanding of the teacher's personal background and serves the classification purpose.

\* Measure of professional orientation:

A teacher's conception of her professional role was measured by a 20 item amended " Likert-type " scale consisting of five subscales, viz., competence orientation, a sense of calling, service orientation, the use of a professional organization as a referent, and autonomy orientation. These subscales were based on the five most commonly used attitudinal characteristics of professionalism discussed in chapter one in this study, and representing a blend of views of Hall(1968), Corwin(1970) and Shaw(1971). The self-regulation dimension in Hall's scale was incorporated into the dimensions, the use of a professional organization as a referent and the autonomy orientation whereas sense of calling to the field was retained and separated from the student orientation dimension in Shaw's scale. The scale also diverged from those used by Corwin and Hall by employing four items in each subscale. The even weighting was to preclude an assumption that any one dimension had priority over others. The twenty items employed in this section were either adapted from those used by Hall, Corwin and Shaw, which were deemed appropriate to the present scale or designed to meet the special situations in schools in Singapore. An example of each type of item appears below in the order mentioned.

- (1) I believe that educational research should be a compulsory subject in the training of teachers. (Competence Orientation)
- (2) I would stay in the profession until my retirement. ( A

## Sence of Calling )

- (3) I believe that my service is essential for and vital to society. ( Service Orientation )
- (4) I believe that teachers should be members of at least one professional teaching association and participating actively in its activities. ( The Use of a Professional Organization as a Referent )
- (5) I believe that only teachers have the right to determine what should or should not be done in the classroom. ( Autonomy Orientation )

For each item, there are five possible alternatives ranging from 'strongly agree' to 'strongly disagree', and are weighted from five to one respectively. Professionalism scores were computed for each respondent by summing the scores assigned to each item in the scale. High professionalism is represented by scores from 74-100, medium professionalism by scores from 47-73, and low professionalism by scores from 20-46.

## \* Measure of professional behavior:

Ten criteria were used as an index to assess a person's professional behavior which, in turn, represented an operationalization of professionalism measured in the previous section. These criteria and their weighting pattern are given below: ( Weights are in parenthesis )

- (1) Number of research reports read regularly.
- |       |     |
|-------|-----|
| 0 - 1 | (1) |
| 2 - 3 | (2) |
| 4 +   | (3) |
- (2) Number of inservice courses attended in the last two years.
- |       |     |
|-------|-----|
| 0 - 1 | (1) |
| 2 - 3 | (2) |
| 4 +   | (3) |

- (3) Intention to seek employment in another occupation.
- |           |     |
|-----------|-----|
| Yes       | (1) |
| Uncertain | (2) |
| No        | (3) |
- (4) Time devoted to professional work such as planning, marking and so on outside the school per week.
- |             |     |
|-------------|-----|
| 0 - 3 hours | (1) |
| 4 - 7 hours | (2) |
| 8 + hours   | (3) |
- (5) Number of educational journals read regularly.
- |       |     |
|-------|-----|
| 0 - 1 | (1) |
| 2 - 3 | (2) |
| 4 +   | (3) |
- (6) Number of professional meetings and conferences attended in the last two years.
- |       |     |
|-------|-----|
| 0 - 1 | (1) |
| 2 - 3 | (2) |
| 4 +   | (3) |
- (7) Number of articles or papers published or presented to conferences and courses in the past two years.
- |       |     |
|-------|-----|
| 0 - 1 | (1) |
| 2 - 3 | (2) |
| 4 +   | (3) |
- (8) Membership in a professional organization.
- |            |     |
|------------|-----|
| 0 - 1 year | (1) |
| 2 years    | (2) |
| 3 + years  | (3) |
- (9) Frequency of participations in activities organized by the teachers' union(s).
- |                |     |
|----------------|-----|
| never - seldom | (1) |
| occasionally   | (2) |
| often - always | (3) |
- (10) Frequency of participations in decision-making regarding professional matters in schools.
- |                |     |
|----------------|-----|
| never - seldom | (1) |
| occasionally   | (2) |
| often - always | (3) |

Each respondent was to give a report of herself on the foregoing aspects and was scored on each of the ten criteria accordingly. A total behavior score was then obtained by summing the scores assigned to each item. High professional behavior is demonstrated by scores from 24-30, medium professional behavior by scores from 17-23, and low professional behavior by scores from 10-16.

#### Survey Procedures:

Bearing in mind the number and the complexity of the sample needed for this study, and the representativeness of the sample, which is a goal most valued by any serious researcher, the first step taken in the collection of data was to approach the Ministry of Education in Singapore about information on women teachers in schools. Besides, it is compulsory for any researcher contemplating a study on teachers in Singapore to obtain permission from the Ministry before committing himself/herself to it. A letter explaining the purpose of the study and the research criteria, was then written to the Ministry. Computer lists containing information on the name of the teachers, their marital status, academic qualification and teaching experience, the medium used in teaching, and the schools which the teachers attached to were subsequently produced by the Computer Service Branch of the Ministry. Teachers were then randomly selected from these lists and assigned to the eighteen categories respectively.

The second step concerned the administration of the research questionnaires. The questionnaires were posted to the respective schools to be forwarded to the teachers. Only Chinese-stream non-graduate teachers were given the Chinese version of the questionnaire. Teachers were allowed a fortnight to complete the questionnaires. A contact telephone number was also attached to the questionnaire so that any query from the teachers could be clarified.

Two hundred and seventy-eight questionnaires, (85.8 per cent of the total questionnaires issued) were obtained at the end of the second week. Only two hundred and sixty-six of these returned questionnaires were usable. Of the remainder, ten were not completed due

to reasons such as teacher transference and teachers' being granted study leave. Two did not meet the selection criteria of the study due to change of marital status of the teachers.

No effort was being made to follow the questionnaires up. Two reasons will suffice to explain this:

Firstly, 85.8 per cent is considered a high return rate for postal questionnaires. For studies using questionnaires as a survey method, more often than not, the researchers have to content themselves with returns as low as 50 or 60. This is under such a circumstance that follow-up is required. ( Kerlinger, 1973. )

Secondly, the conditions under which the survey was conducted made the follow-up impossible.

#### Statistical Treatment of the Data:

Analysis of the data from the two hundred and sixty-six questionnaires was carried out using multivariate analysis of variance (MANOVA). Cell means and standard deviations for the teachers' professionalism and behavior scores were computed. Boxplots (Tukey, 1977) for these two variables were obtained in order to produce a visual comparison of the spreads of scores for the eighteen categories. Multivariate tests of significance and univariate F-tests were then employed to investigate the effects of marital status, educational attainments, teaching experiences as well as their interaction effects on teachers' professionalism and behavior scores. Significant differences, if any, between cell means due to these hypothesis factors were further examined by using Scheffé's post hoc test to determine the direction of the effect. Differences of teachers' scores on the five respective professional subscales were likewise tested and analysed. Finally, correlations between scores of these five subscales, between these subscales and the total professionalism scale, and between the professionalism scores and the behavior scores of the teachers were examined.

## CHAPTER FIVE

### RESEARCH FINDINGS

The analyses presented in this chapter were based upon data collected from the two hundred and sixty-six questionnaires obtained from the teachers, and were guided by five major issues. These issues concerned: (1) The effect of marriage upon women teachers' professionalism, (2) the role education and teaching experience play in moderating any such effect, (3) the effect of educational attainments upon women teachers' professionalism, (4) the effect of teaching experience upon women teachers' professional orientation and, (5) the correlation of professional orientations of women teachers with their professional behavior. The overall concern of these analyses was to generate an understanding of women teachers' professionalism in Singapore.

#### Bio-data of the Respondents:

Of the two hundred and seventy-eight returned questionnaires, two hundred and sixty-six were usable. A breakdown of the marital status, family commitment in terms of the number and age of children, educational attainments, teaching experience, pupils' level and age characteristics of these respondents is given in Table 1.

As can be seen, women teachers in this study differed in marriage and family commitment, educational attainments, teaching experience, the level of pupils taught, and age. 48.5 per cent of these teachers were married. Although a majority of these teachers (61.24%) reported having small family, an equally large number of them reported having pre-school children. Among teachers who pursued studies beyond high school level, all except two who earned an M.Ed.

Table 1: Sample Characteristics By Marital Status, Family Commitment, Educational Attainments, Teaching Experience, Pupils' Level And Age.

Sample characteristics	N.	%
<b>Marital status</b>		
Single	137	51.5
Married	129	48.5
<b>Educational attainments</b>		
Post-graduate	77	28.95
Graduate	100	37.59
Non-graduate	89	33.46
<b>Teaching experience (year)</b>		
1 - 2	82	30.83
3 - 9	87	32.70
10 +	97	36.47
<b>No. of children</b>		
1 - 2	79	61.24
3	22	17.05
4 or more	3	2.33
NO children	25	19.38
<b>Age of children</b>		
Pre-school age	67	64.42
School age	47	45.19
Post-school age	12	11.54
<b>Pupils' level</b>		
Pre-primary	5	1.88
Primary	72	27.07
Secondary	136	51.13
Pre-university	53	19.92
<b>Age</b>		
21 - 32	136	51.13
33 - 44	116	43.61
45 +	14	5.26

degree read subjects other than education during their university years. (e.g. Arts, Science, Commerce, Law and Mathematics.) These teachers have spent considerably less time with the Institute of Education (formerly the Teachers' Training College) as compared to their non-graduate counterparts. About 51.13 per cent of the women teachers in this study were teaching in secondary schools, 27.07 per cent in primary schools, 19.92 per cent in pre-university classes and only 1.88 per cent in pre-primary education. Most of these teachers aged between twenty-two and forty-four.

#### Frequency Distributions of Professionalism Scores and Behavior Scores:

Before focusing on those aspects of the data which bear on the research questions asked in the beginning of this chapter, an overview will be given of the distributions of professionalism scores and behavior scores of the teachers as a whole. Item analyses of both the professional orientation questionnaire and professional behavior questionnaire appear in Appendix B.

From Table 2, which shows the frequency distribution of professionalism scores for teachers using 17 class intervals of size 2, it can be seen that professionalism scores of the teachers varied widely from 52 to 87. (25) The high frequency scores fell between 66 and 77. Figure 1 that follows highlights the shape of the distribution and shows that women teachers, on the whole, demonstrated high to moderate professional orientations.

Regrouping of the behavior scores of these women teachers has not been done, due to the small range of score values. Distribution of the scores is shown in Figure 2. The negatively skewed distribution shown in Figure 2 indicates that though most of the teachers exhibited low professional behavior by scoring below the point 16, a few teachers, nevertheless, demonstrated moderate professional behavior. The modal behavior score was 14.



Table 2: Frequency Distribution Of Professionalism Scores For The Entire Sample With Class Intervals Of 2 Points.

Class interval	F
86 - 87	2
84 - 85	3
82 - 83	6
80 - 81	10
78 - 79	16
76 - 77	29
74 - 75	31
72 - 73	29
70 - 71	29
68 - 69	29
66 - 67	30
64 - 65	18
62 - 63	14
60 - 61	13
58 - 59	5
56 - 57	0
54 - 55	1
52 - 53	1

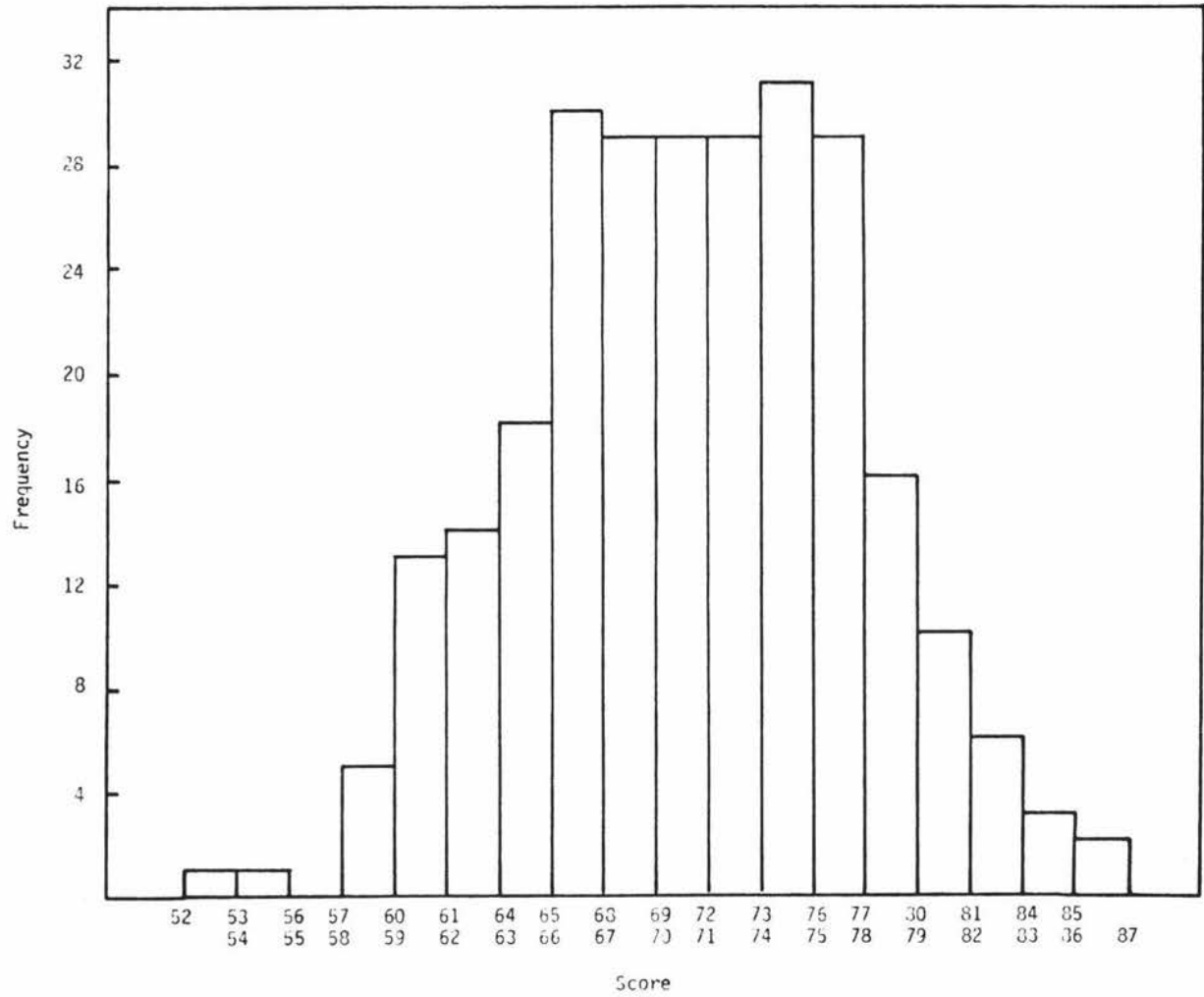


Figure 1: Histogram Of Professionalism Scores For The Entire Sample.

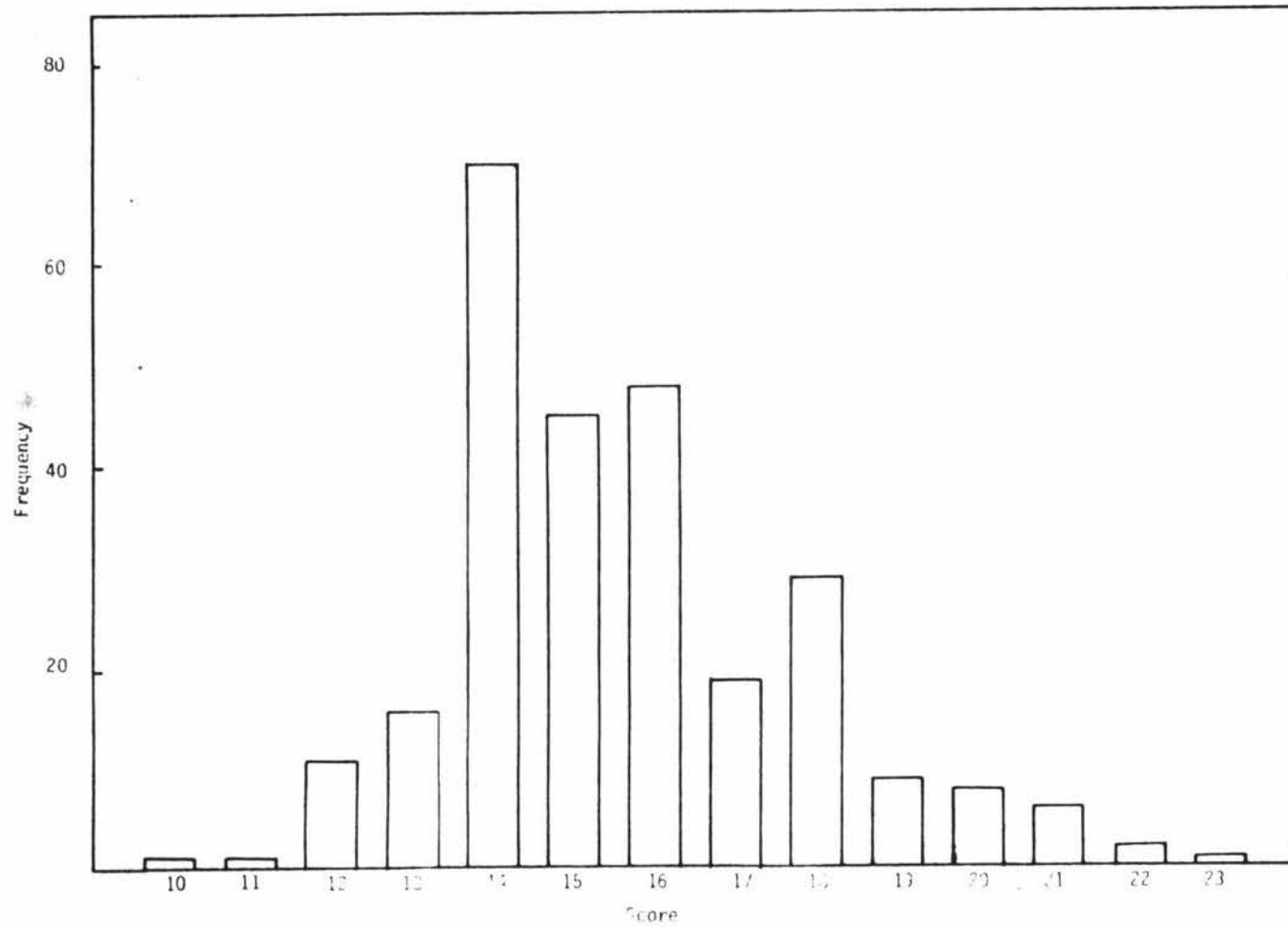


Figure 2: Histogram Of Behavior Scores For The Entire Sample.

The professionalism scores and the behavior scores of the teachers were further cross-tabulated and the number and percentage of teachers at each of the three levels of both variables are given in Table 3.

Table 3: Number And Percentage Of Teachers At Different Levels Of Professional Orientation And Behavior.

Professionalism level	Behavior level		Total
	Medium (17-23)	Low (10-16)	
High (74-100)	n = 35	n = 62	n = 97
	13.2%	23.3%	36.5%
Medium (47-73)	n = 39	n = 130	n = 169
	14.6%	48.9%	63.5%
Total	n = 74	n = 192	n = 266
	27.8%	72.2%	100%

Evidently, a vast majority of women teachers in this study reported having moderate professional orientation and low professional behavior. No high professional behavior was reported among teachers exhibiting high professionalism; 13.2 per cent of them reported having moderate professional behavior and 23.3 per cent fell within the low category. The same pattern of behavior is demonstrated by the teachers holding a moderate attitude towards teaching. Only 14.6 per cent of these teachers acted according to their stated beliefs, 48.9 per cent performed below the level. This issue will be further taken up by the correlational study in the latter part of this chapter.

Means, Standard Deviations and Boxplots for Professionalism Scores and Behavior Scores:

Means and standard deviations of both the professionalism scores and behavior scores for the individual subgroups as well as for the entire sample were computed and are reported in Tables 4 and 5.

While means and standard deviations may still be the prime statistics used for inferences in the study, they are not resistant to the impact that one or a few deviant values may have on the results; boxplots based on Tukey's exploratory data analysis (1977) were therefore employed to provide additional information on the spread of scores for each subgroup in the expectation of throwing light on the interpretation of the data in hand. Figures 3 and 4 are boxplots for professionalism scores and behavior scores respectively, using the two-way classification model advocated by Leinhardt (1980). (26)

Two main conclusions can be drawn from Figure 3.

(1) Professionalism scores for the individual subgroups, on the whole, were quite evenly spread out, except for a few extreme cases reported in the long service categories.

(2) Married women teachers were generally low in these values, viz., the median, the upper and the lower hinges, as compared to boxplots for the single teachers.

Distribution of scores shown in Figure 4 displayed greater variation across different lengths of service for both the single and married teachers. Three out of the six plots representing beginning teachers were reported to have small variance. Teachers in the long service groups, on the contrary, scored within a wider range of values and were more inclined than teachers in other service groups to have high scores on professional behavior.

Table 4: Means And Standard Deviations Of Professionalism Scores For All Variables.

Variable	Experience <sup>a</sup>									Sub-total			Total		
	1 - 2			3 - 9			10 +			N	$\bar{X}$	SD	N	$\bar{X}$	SD
Education- Marital status	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
Post-graduate															
Single	15	74.04	4.98	13	73.00	6.75	10	71.70	6.80	38	73.08	6.02			
Married	8	68.50	7.50	16	71.63	6.34	15	71.60	7.53	39	70.97	6.98	77	72.01	6.57
Graduate															
Single	18	70.61	4.53	14	71.21	6.10	18	70.61	6.70	50	70.78	5.71			
Married	14	68.86	4.90	18	68.67	6.53	18	71.56	8.13	50	69.76	6.78	100	70.27	6.26
Non-graduate															
Single	18	73.17	4.58	13	73.23	5.96	18	71.67	5.92	49	72.63	5.41			
Married	9	68.56	5.79	13	68.30	5.54	18	68.44	5.38	40	68.43	5.38	89	70.74	5.77
Sub-total															
Single	51	72.53	4.82	40	72.45	6.18	46	71.26	6.30	137	72.08	5.74			
Married	31	68.68	5.70	47	69.57	6.26	51	70.46	7.10	129	69.71	6.47	266	70.93	6.21
Total	82	71.07	5.47	87	70.90	6.35	97	70.85	6.71	266	70.93	6.21			

<sup>a</sup> Experience is indicated by the number of years the teacher spent in the teaching service.

Table 5: Means And Standard Deviations Of Behavior Scores For All Variables.

Variable	Experience <sup>a</sup>									Sub-total			Total		
	1 - 2			3 - 9			10 +			N	$\bar{X}$	SD	N	$\bar{X}$	SD
Education-Marital status	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
Post-graduate															
Single	15	14.60	1.68	13	16.00	1.91	10	15.30	1.49	38	15.26	1.78	77	15.57	2.19
Married	8	13.88	1.89	16	15.50	1.41	15	17.33	2.89	39	15.87	2.51			
Graduate															
Single	18	14.50	.99	14	15.57	1.99	18	16.40	2.52	50	15.48	2.06	100	15.65	2.20
Married	14	15.36	1.45	13	15.72	2.47	18	16.28	2.76	50	15.82	2.34			
Non-graduate															
Single	18	14.33	1.57	13	15.00	1.35	18	17.22	2.51	49	15.57	2.29	89	15.61	2.23
Married	9	14.56	1.13	13	15.62	1.56	18	16.22	2.78	40	15.65	2.19			
Sub-total															
Single	51	14.47	1.41	40	15.53	1.78	46	16.48	2.40	137	15.45	2.06	266	15.61	2.20
Married	31	14.74	1.57	47	15.62	1.88	51	16.57	2.80	129	15.78	2.33			
Total															
	82	14.57	1.47	87	15.58	1.83	97	16.53	2.60	266	15.61	2.20			

<sup>a</sup> Experience is indicated by the number of years the teacher spent in the teaching service.

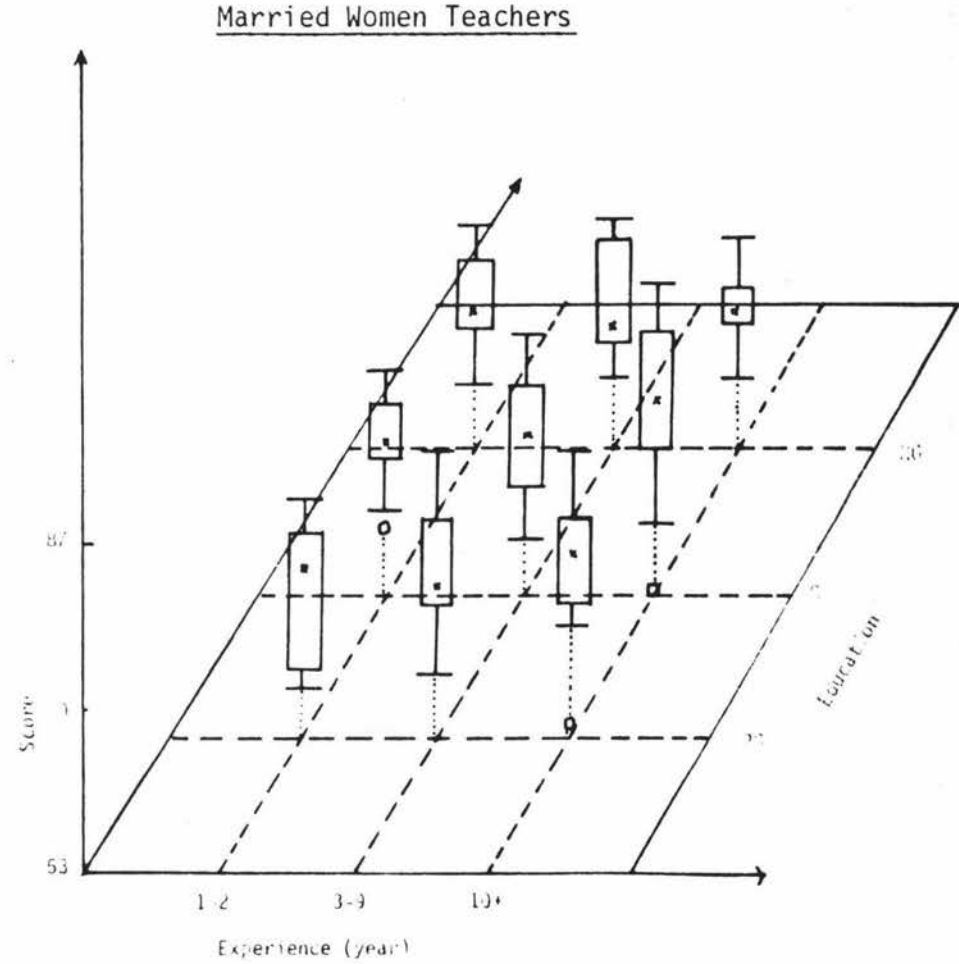
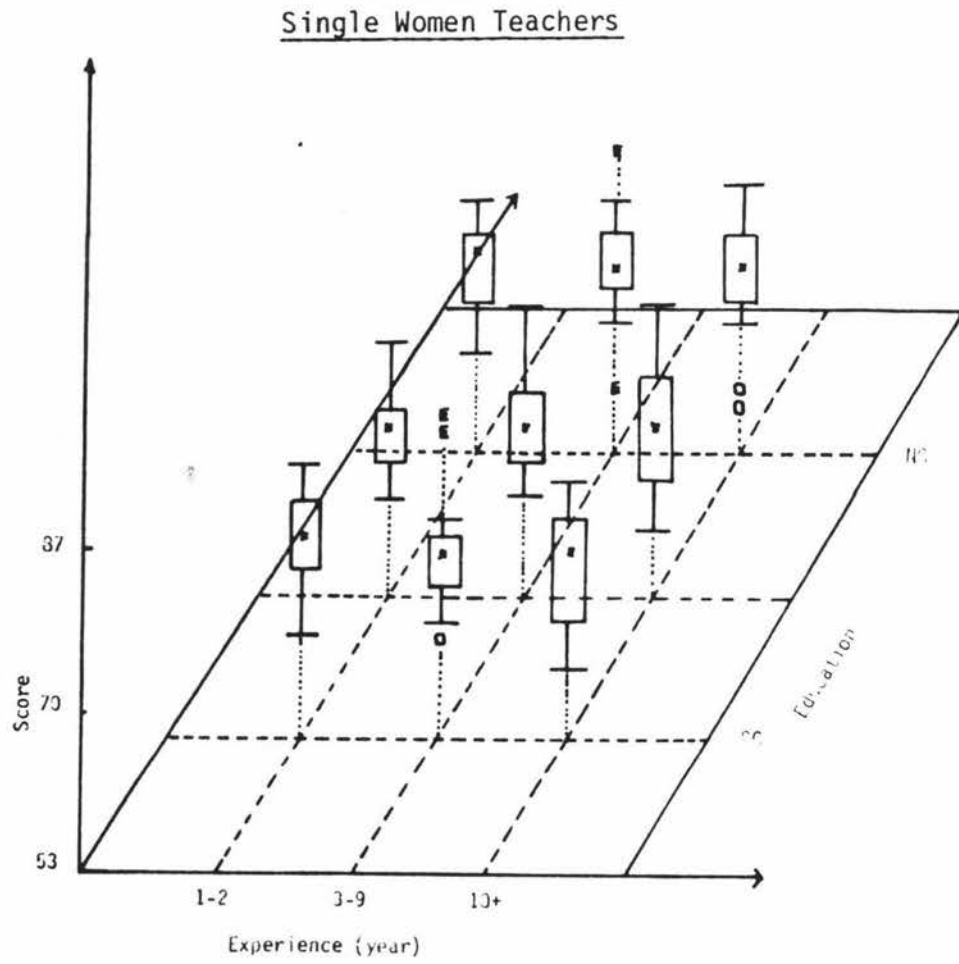
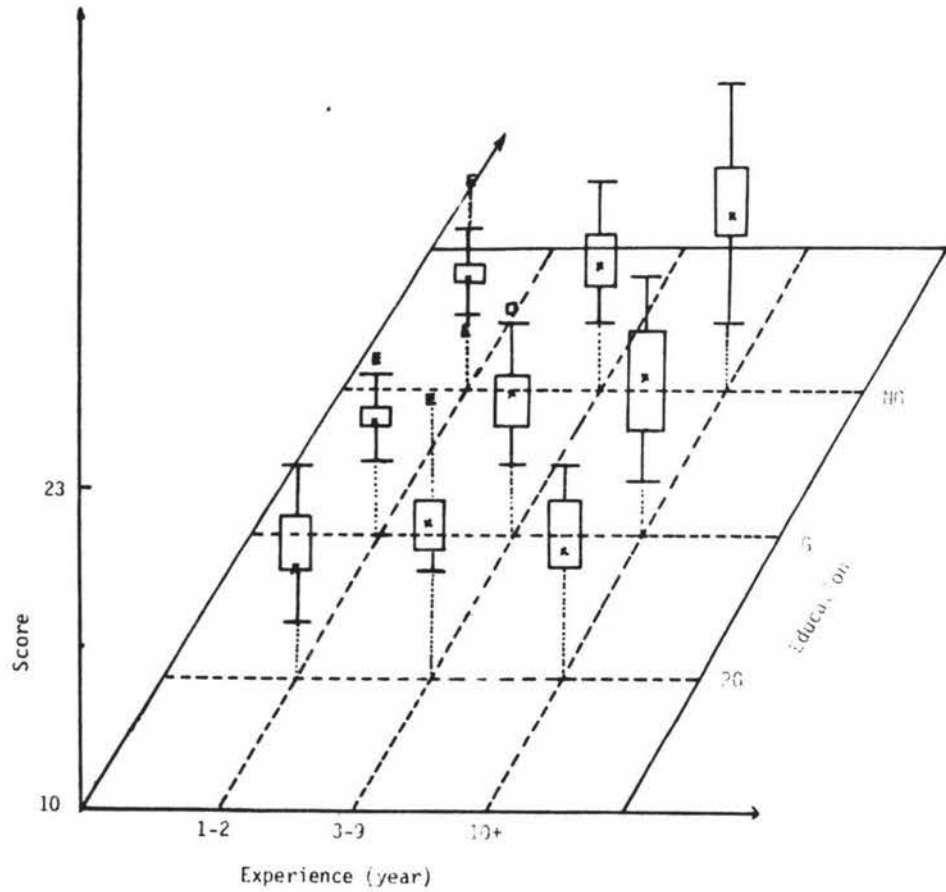


Figure 3: Boxplots For Professionalism Scores Of Teachers In Different Subgroups.



Single Women Teachers



Married Women Teachers

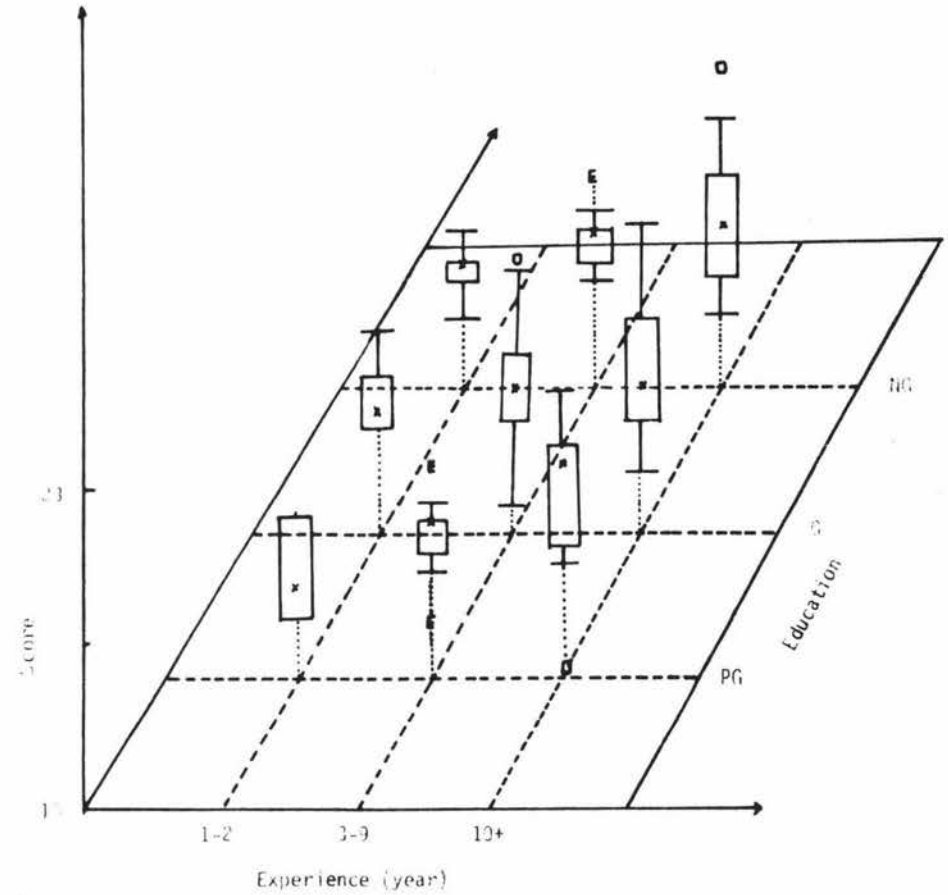


Figure 4: Boxplots For Behavior Scores Of Teachers In Different Subgroups.

Findings in Relation to Research Hypotheses:

A multivariate analysis of variance was computed on these professionalism scores and behavior scores using marital status, educational attainments, and teaching experience as variables. Tables 6 to 8 show the results of the analysis.

Table 6: Multivariate F Table For Professionalism Scores And Behavior Scores.

Effect	Hotellings	Approx. F	Hypoth.DF	Error DF	Sig.of F
Marital status					
x Education	0.04	1.45	8	492	0.174
x Experience					
Education x Experience	0.02	0.06	8	492	0.764
Marital status x Experience	0.12	0.74	4	492	0.562
Marital status x Education	0.12	0.75	4	492	0.559
Experience	0.15	9.22	4	492	0.000
Education	0.15	0.93	4	492	0.449
Marital status	0.53	6.59	2	247	0.002

Table 7: Univariate F Table for Professionalism Scores.

Effect	DF	SS	MS	F	Sig. of F
Marital status x Education	4	56.58	14.14	0.37	0.827
Marital status x Experience	4	54.79	13.70	0.36	0.835
Marital status x Experience	2	112.15	56.07	1.49	0.228
Marital status x Education	2	111.45	55.72	1.48	0.231
Experience	2	6.35	3.18	0.08	0.919
Education	2	99.24	49.62	1.32	0.27
Marital status	1	414.20	414.20	10.97	0.001
Error	248	9361.70	37.75		

Table 8: Univariate F Table For Behavior Scores.

Effect	DF	SS	MS	F	Sig.of F
Marital status x Education x Experience	4	43.08	10.77	2.53	0.041
Education x Experience	4	11.97	2.99	0.70	0.590
Marital status x Experience	2	0.62	0.31	0.07	0.929
Marital status x Education	2	1.64	0.82	0.19	0.825
Experience	2	151.97	75.98	17.88	0.000
Education	2	1.89	0.95	0.22	0.801
Marital status	1	1.84	1.84	0.43	0.511
Error	248	1054.07	4.25		

These tables showed a significant marital status main effect on professionalism scores of teachers, and significant experience main effect and marital status by education by experience interaction effect on their behavior scores. Several non-significant findings were also reported. Whereas no significant marital status by education by experience, education by experience, marital status by experience, and marital status by education interactions, education and experience main effects were found upon the professionalism scores of the women teachers, non-significant education by experience, marital status by education, marital status by experience interactions, marital status and education main effects were also reported for their behavior scores. These findings will be analysed according to the hypotheses of the study below.

Hypothesis 1 stated:

Professionalism scores will vary with the marital status of women teachers: Single women teachers will display higher professionalism.

Table 7 shows that marital status is the only significant factor in influencing women teachers' professionalism ( $P < .001$ ). Inspection of the means reported in Table 4 helps explain the finding. By contrasting the mean professionalism scores for both single and married women teachers, the direction of the influence was ascertained. Single women teachers were found to have scored favourably higher than their married colleagues. This finding has lent full support to the hypothesis that single women teachers will display higher professionalism.

Hypothesis 2 stated:

Differences in professionalism due to differences in marital status of the women teachers will be moderated by the educational attainments and teaching experience of the teachers.

Although non-significant marital status by education by experience, marital status by education, and marital status by experience

interactions were reported in Table 7, further examination of the mean professionalism scores for married women teachers in different service and education subgroups has indicated that professionalism scores of married women teachers varied positively with their teaching experience and educational attainments ( Table 4 ). The variation, however, was not sufficient to nullify the effect marriage had on the professional orientation of women teachers.

It follows then, that the hypothesis that differences in professionalism due to differences in marital status of the women teachers will be moderated by the educational attainments and teaching experience of the teachers, is rejected.

Hypothesis 3 stated:

The higher the educational attainments, the higher the professionalism.

As suggested by the non-significant education main effect in Table 7 (  $P < .270$  ), no difference was reported between professionalism scores of women teachers who had different educational attainments. The hypothesis that education is a facilitator of women teachers' professionalism is therefore not supported.

Hypothesis 4 stated:

The longer the service, the higher the professionalism.

Similarly, the insignificant F-ratio (  $P < .919$  ) reported in Table 7 has indicated that there is no relationship between the lengths of service rendered by the teachers and their professional orientations. It follows then, that the hypothesis that the longer the service, the higher the professionalism, is not sustained.

Hypothesis 5 stated:

The higher the professional orientation, the higher the professional behavior.

Interestingly, in spite of the difference reported between the

professional orientations of single and married women teachers, no difference associated with the marital status of the teachers was found in their behavior. The opposite can be applied to the experience variable. The significant F-ratio (  $P < .000$  ) shown in Table 8 suggests that experience is an important factor in influencing women teachers' behavior. A post hoc comparison using Scheffé's test was therefore conducted to examine the direction of the effect. The procedure is presented in Appendix C.

Let  $\bar{X}_a = 14.573$  ( mean behavior score for 1-2 year service group )

$\bar{X}_b = 15.575$  ( mean behavior score for 3-9 year service group )

$\bar{X}_c = 16.526$  ( mean behavior score for 10 + year service group )

The Contrasts:

$$\bar{X}_a \neq \bar{X}_b$$

$$\bar{X}_b \neq \bar{X}_c$$

$$\bar{X}_a \neq \bar{X}_c$$

The formula:

$$t_{\text{observed}} = \frac{\hat{C}}{\sqrt{MS_w \left( \frac{w_1^2}{n_1} + \frac{w_2^2}{n_2} + \dots + \frac{w_k^2}{n_k} \right)}}$$

$$t_{\text{critical}} = \sqrt{(K-1) F_{\text{crit.}} (\alpha, K-1, df_w)}$$

Table 9 shows the results of the calculation.

Table 9: Scheffé's Test: Behavior Scores By Experience.

Contrast	$t_{\text{observed}}$
$\bar{X}_a$ vs. $\bar{X}_b$	3.455
$\bar{X}_b$ vs. $\bar{X}_c$	3.279
$\bar{X}_a$ vs. $\bar{X}_c$	6.734

Note.  $t_{\text{critical}} = 2.47$

Since 3.455, 3.279 and 6.734 > 2.47, it is therefore concluded that  $\bar{X}_b$  is significantly higher than  $\bar{X}_a$ ,  $\bar{X}_c$  is significantly higher than  $\bar{X}_b$  and  $\bar{X}_a$ . In other words, teachers in the medium service group were found to have behaved more professionally than beginning teachers, and teachers with no less than ten years' service have excelled the former two groups of teachers in professional behavior. The wider gap, as can be seen, was found between the long service group and the beginning teachers.

In order to understand the marital status by education by experience interaction reported in the behavior scores of the teachers, a graph showing the interaction was plotted using Table 6. This is shown in Figure 5. Several different behavior patterns were evidenced:

- (1) While both single and married beginning teachers without a university degree displayed similar behavior, different behavior was reported for their graduate and post-graduate peers. Married graduate teachers showed higher professional behavior than their single counterparts whereas the trend was reversed for the post-graduate beginning teachers.



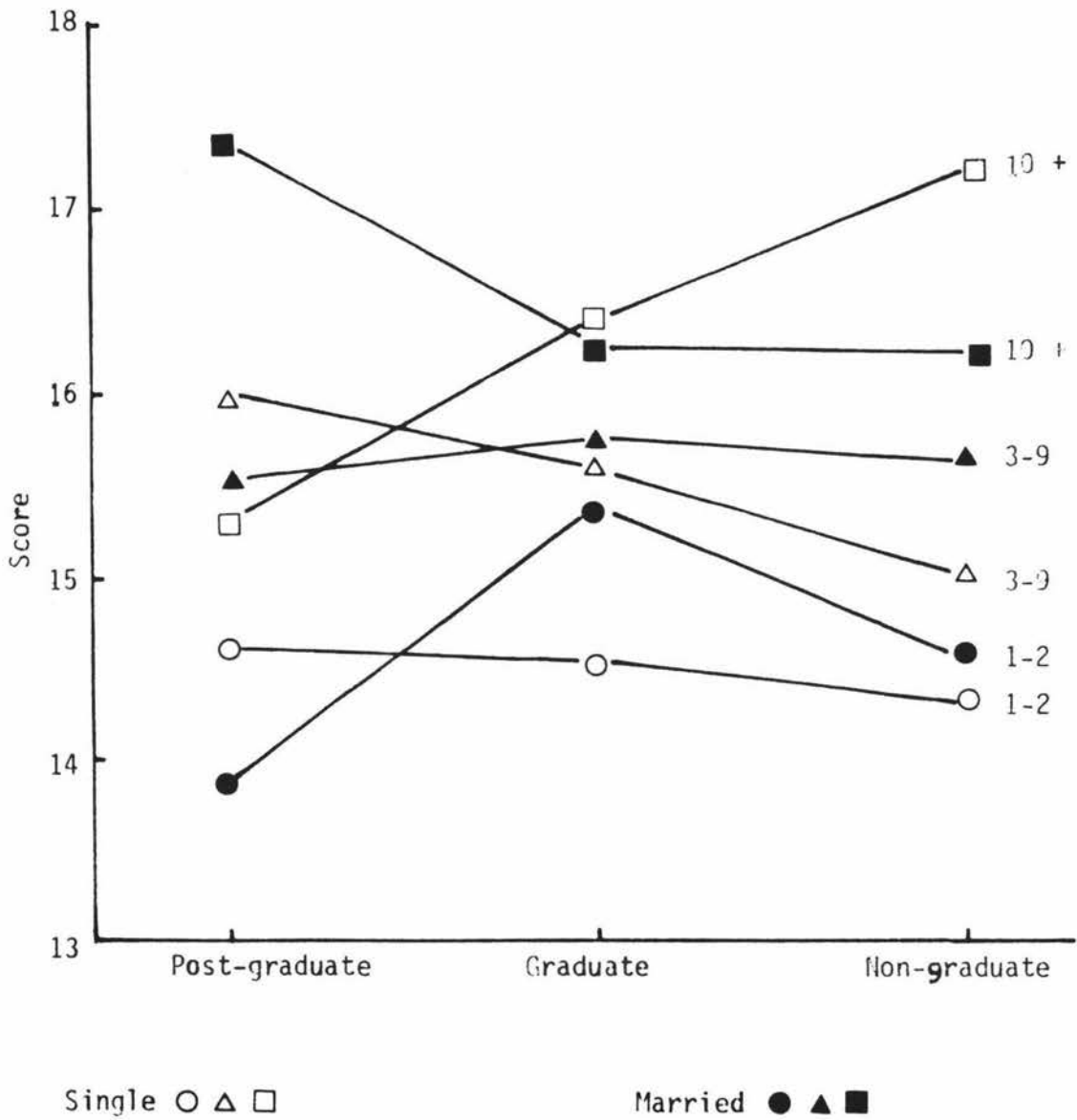


Figure 5: Marital Status By Education By Experience (Year) Interaction For Behavior Scores.

(2) More concerted behavior was reported among graduate teachers in the medium service group. The married non-graduate teachers and the single post-graduate teachers, on the other hand, reported higher professional behavior.

(3) In the long service group, married women teachers with highest education qualification exhibited higher professional behavior than their single and equally trained colleagues whereas the contrary was the case with non-graduate teachers.

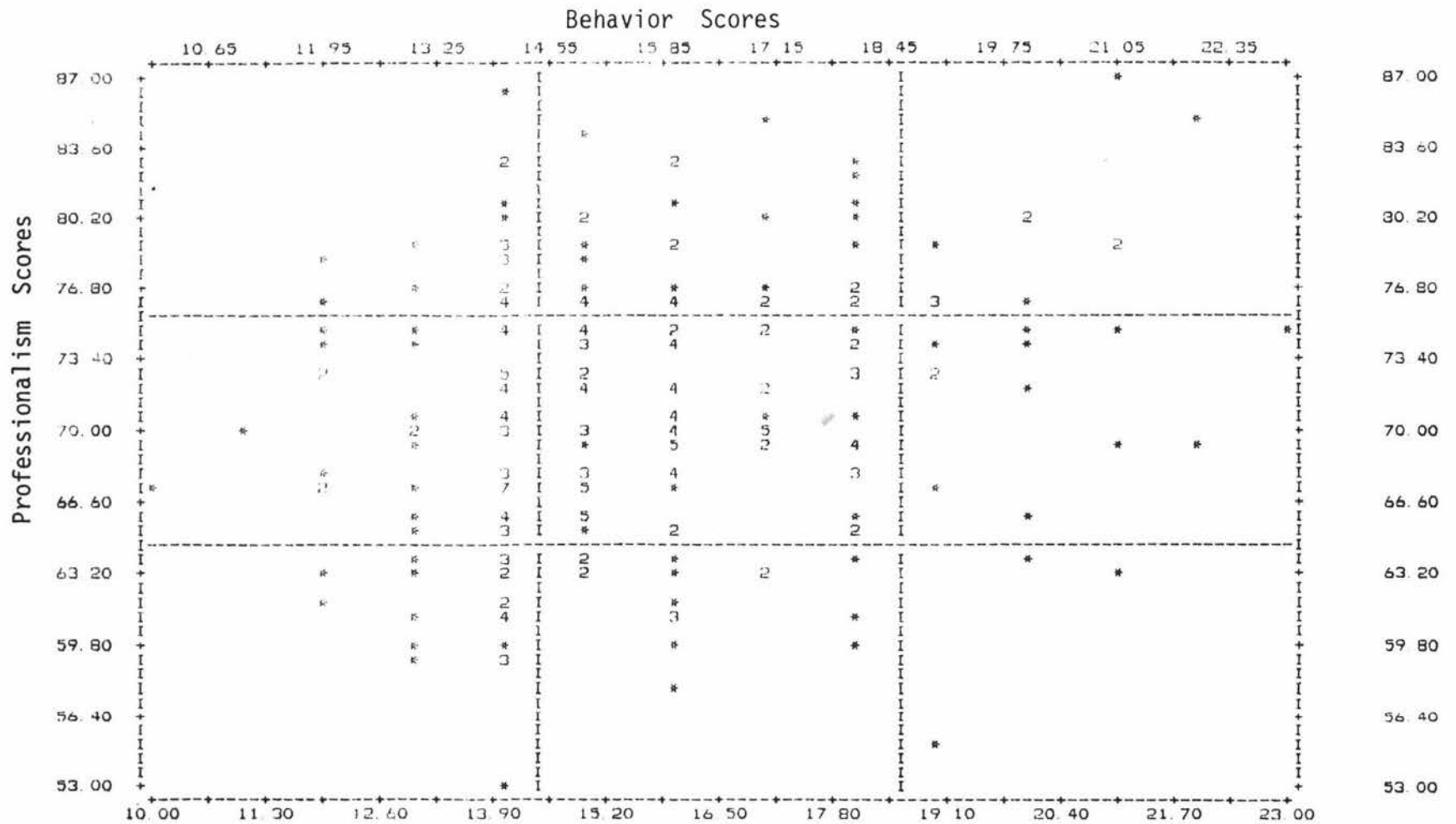
(4) Finally, it was also found that not only did single post-graduate teachers having one to two year teaching experience report significantly lower professional behavior than their married counterparts, they were also shown to have behaved less professionally than their equals in the medium service group.

Thus far, the research findings have shown that the professional orientation and behavior of women teachers in the study were influenced by different factors. The scattergram and statistics shown in Figure 6 further indicated that although there was a positive relationship existing between the professionalism scores and behavior scores of the teachers, the relationship was, nevertheless, a weak one ( $r = 0.20$ ).

It follows then that although hypothesis 5 which states that the higher the professional orientation, the higher the professional behavior is not strongly supported, the findings are, nevertheless, suggestive of such a relationship.

#### The Analysis of Professional Subscales:

Finally, the professional orientation of women teachers was further explored by scrutinizing the teachers' scores on the five professional dimensions respectively, by comparing the differences between responses of the single and married teachers to these five subscales, and by testing the relations of these subscales to one



STATISTICS.

CORRELATION (R)-	0.20123	R SQUARED -	0.04049	SIGNIFICANCE -	0.00048
STD ERR OF EST -	6.09367	INTERCEPT (A) -	62.05993	SLOPE (B) -	0.56828
PLOTTED VALUES -	266	EXCLUDED VALUES-	0	MISSING VALUES -	0

Figure 6: Scattergram: Professionalism Scores By Behavior Scores

another as well as to the total professionalism scale.

Table 10 shows that women teachers, on the whole, gave priority to the service ideal of their work. They scored relatively low on questions pertaining to the use of the professional organization as a referent. The other three attributes of professionalism, viz., competence orientation, a sense of calling and autonomy orientation, carried almost equal weight in their responses.

Table 10: Means And Standard Deviations Of Professional Subscale Scores For Single And Married Women Teachers.

Professional subscale	Single		Married		Total	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Competence orientation	14.68	2.04	14.29	2.23	14.49	2.14
A sense of calling	14.66	2.43	13.92	2.70	14.30	2.59
Service orientation	15.52	1.75	15.07	2.02	15.30	1.89
The use of a professional organization as a referent	12.53	1.97	12.20	2.30	12.37	2.14
Autonomy orientation	14.69	1.52	14.24	1.70	14.47	1.62
Total	72.08	5.74	69.71	6.47	70.93	6.21

Since the relatively negative effect of marriage on women teachers' professional orientation has been suggested, a univariate analysis of variance was employed to test its influence on women teachers' attitude towards these five dimensions of professionalism. The results are revealed in Table 11.

An examination of both Tables 10 and 11 shows that single women teachers exhibited significantly higher attitude than married women teachers towards three out of the five professional dimensions. These dimensions were: A sense of calling, service orientation and autonomy orientation.

Table 11: Univariate F Table For Professional Subscale Scores  
Using Marital Status As An Independent Variable.

Variable	Hypoth.SS	Error SS	Hypoth.MS	Error MS	F	Sig.of F
Subscale <sup>a</sup>						
1	7.84	1120.90	7.84	4.52	1.74	0.189
2	49.69	1623.55	49.69	6.55	7.59	0.006
3	16.78	906.82	16.78	3.66	4.59	0.033
4	7.27	1159.32	7.27	4.68	1.56	0.213
5	13.76	668.74	13.76	2.70	5.10	0.025

Note. DF = 1, 248

<sup>a</sup> Subscales appear in this Table are arranged in the order shown in Table 10.

Pearson product-moment correlation coefficients were also computed in order to show the correlations between the five subscales and the total professional scale ( Table 12 ). The results indicated that while the autonomy orientation of women teachers was weakly, though positively related to their overall professional stand, their attitudes towards the other four dimensions were positively and moderately correlated with their levels of professionalism. However, low correlations were reported between different professional dimensions. A negative relationship was even found between teachers' autonomy orientation and a sense of calling.

Table 12: Correlations Between Subscales And Total Professional Scale.

	Pscore	Sub 1	Sub 2	Sub 3	Sub 4
Sub 1	0.6062 P=0.000				
Sub 2	0.6439 P=0.000	0.1494 P=0.007			
Sub 3	0.5857 P=0.000	0.1618 P=0.004	0.2705 P=0.000		
Sub 4	0.6675 P=0.000	0.3111 P=0.000	0.2961 P=0.000	0.1492 P=0.007	
Sub 5	0.4360 P=0.000	0.1647 P=0.004	-0.0340 P=0.290	0.2305 P=0.000	0.1788 P=0.002

### Summary:

To conclude, women teachers in Singapore, on the whole, displayed high and medium professional orientations (36.5% and 63.5% respectively). However, the result was not very encouraging as far as their behavior was concerned. 72.2 per cent of these teachers reported low professional behavior whereas 27.8 per cent reported moderate professional behavior. Only one of the hypotheses raised in the study was supported and this concerned the effect of marriage on the professional orientation of women teachers. A significant difference was reported between the professional orientations of single and married women teachers with the former being found more professionally oriented. Educational attainments and teaching experiences were both reported to be ineffective in moderating this relatively negative impact of marriage on women teachers' professionalism and were both insignificant determinants of their professional orientation. On the contrary, evidence has shown that experiences, not marital status, was the prime factor in influencing these women teachers' reported behavior. The interaction of all variables, viz., marital status, educational attainments and teaching experiences, was also associated with differences between the teachers' behavior. This lack of correspondence between women teachers' professional orientations and their behavior was further confirmed by the correlational study which revealed that only a low relationship existed between these two variables.

Finally, the review of the teachers' scores on the five professional subscales showed that while the entire sample regarded the service ideal highly, married women teachers differed significantly from their single counterparts by showing inferior attitude towards three of the dimensions. The responses of women teachers to these five professional subscales were also found to be moderately correlated with their degrees of professionalism.

## CHAPTER SIX

### DISCUSSION

The purpose of this study is to ascertain the professional orientation of women teachers in Singapore. In the belief that a more professional image would boost the status and quality of the teaching service, the Singapore Ministry of Education has made substantial changes in the administrative structures of education since the end of the last decade. Greater emphasis has been placed on the attitudinal aspect of professionalism, for it is believed that an appropriate work attitude and manner is a source of strength which not only guides the teachers at work, but also sustains their efforts in their quest for a more professional practice. Thus, teachers are expected to incorporate into their value systems certain orientations indispensable to a full-fledged professional. These are orientations towards professional competence, professional commitments, students, colleagues and autonomy.

The acquisition as well as maximization of these virtues on the part of the school teachers, however, have been called into question by many critics in view of the number of women teachers in the profession. Examples are frequently cited from the literature to show that by being socialized into the feminine culture and bound by their family obligations, women teachers have failed to live up to the professional expectations. On the other hand, there is no lack of evidence suggesting that with access to higher education and a long history of work, women can be as professionally minded as their male counterparts. They tend to combine marriage and work at least.

Recognising the partially viable influence of the stereotyped norm regarding woman's role in society, the present paper predicts that marriage will play an important part in undermining our women

teachers' professionalism. However, the paper also hypothesizes the positive effects of education and experience on women teachers' professionalism. Moreover, the study also anticipates a positive relationship between women teachers' professionalism and their professional behavior.

The overall findings reveal that a vast majority of women teachers in Singapore tend to display moderate professional orientation and low professional behavior, that married women teachers are less professionally oriented than their single counterparts, and that education and experience are ineffective factors in boosting women teachers' professionalism. These findings, however, should not be understood simply by virtue of the influence of biological and personality variables, which have been overstated by many anti-feminist critics in the past. Situational factors including the social contexts in which the teachers function, role strains experienced by the dual-role women teachers, weaknesses inherent in higher education and the training of teachers as well as the many and rapid changes introduced to our education system during the last decade need to be scrutinized if a more fruitful avenue of analysis is to be secured. This is also to ensure an enlightened view on the data in hands. The subsequent sections of this chapter will discuss the empirical findings at length. The implications of these findings for the teaching profession in Singapore will also be speculated upon. Finally, a section will be devoted to the resolving of problems cropped up during the course of discussion.

#### Marital Status as an Important Determinant of Women Teachers' Professional Orientation:

The finding that married women teachers in Singapore aspire to the professional ideology to a lesser degree than their single colleagues has once again supported the conventional belief that there is a conflicting relationship between the various roles played by a woman who takes on the responsibilities of a profession in addition



to her family. Despite the determination of our women teachers to utilize their abilities and education in the workplace as well as in the home, family remains to be their primary concern. The influence of marital status holds, irrespective of the education levels of these women teachers and their lengths of service to the profession. On the whole, opinions of these single and married women teachers differ significantly on three of the five attributes used to test their professionalism. Married women are less inclined than the unmarried ones to demonstrate a sense of calling to their profession, nor are they prepared to the same extent as their single fellow teachers are to stress their service to students as well as to exercise professional autonomy. Fortunately, a few additional comments given by some of these married teachers help shed light on their responses. For example, one teacher indicated that job satisfaction and the feeling that " you are still needed " determined whether or not she would stay in the profession. When asked if she would spend extra hours with students, this teacher maintained that she would do so provided that the interest of her family would not be jeopardized. Another teacher was strongly against this very idea of spending extra hours with students for she believed that she was already spending extra time on the job. One of the year one teachers wrote that her plan to stay in the profession until retirement was contingent upon the availability of domestic help.

Implicit in these scattered comments are some possible causes responsible for the disparities in the professional orientation of women teachers. (1) Family responsibilities are important encumbrances, though they may not be the only ones, which impinge upon women teachers' work commitment. (2) The conditions of work and the degree of satisfaction married women teachers derive from their profession, if perceived negatively, would also add strength to the existing influence marriage has upon the commitment and service ethos of our women teachers.

However, the reason why married women teachers are less oriented towards autonomy than single women teachers is otherwise difficult to comprehend. One can only infer from reasoning that to claim pro-

fessional autonomy, the teacher is required to assume certain degree of responsibility. Since the teacher is unwilling to take up additional responsibility which may have aggravated the role strain she is currently experiencing, she may therefore wish to relinquish some of her professional autonomy to the school administrators.

The impact on professionalism of the homemaker role of women teachers is real and should not be underestimated. The results, however, should not be taken to discourage married women from the pursuit of a serious career in the teaching profession. The results simply point to the need for sensitivity on the part of the Ministry personnel to the sources of conflicts between these two different roles of our women teachers so that, where desirable, conflicts may be resolved. Recognition of these conflicts and the remedial measures are of extreme importance in view of the number of women teachers in the profession and the target of our education to implement full-day school by 1989. Since it can be presumed that most women expect to marry and prolonged school hours certainly pose greater demands on both energy and time of the teacher, it can be anticipated that more married women teachers will withdraw from the profession if no action is being taken.

#### Ineffectiveness of Education in Promoting Women Teachers' Professionalism:

One of the hypotheses of this study is that acquisition of that high degree of skill and knowledge essential to the teaching profession through higher education not only enhances the competence of women teachers, but above all, it also permits a more positive view of these teachers on their role as professionals. It is, therefore, expected that education factor would minimize the influence caused by the family life of the teachers on their professional orientations and, that teachers holding high qualifications would be more professionally minded than their less qualified counterparts. Contrary to expectation, the findings contradict both the previous studies in this area and

the assumptions of this paper by showing that no such relationships exist.

The finding that education attainments are not the most important locus for the formation of the professional orientation of women teachers may be understood in the light of the following:

Firstly, being independent of teacher training programmes organized by the Institute of Education, university education places emphasis on the developing of expertise in a subject matter only. This may enhance the interest and knowledge on the part of the teacher in her favourite subject, hence, fostering her identification with the academic milieu rather than cultivating in her a strong orientation towards the practice of her profession.

Secondly, an alternative way of interpreting the result is that the influence of higher education on women teachers' professionalism may be transitory, though real. Frustrations arising from the immediacy of classroom activities, the interpersonal relationships in schools and the interactions between teachers, the Ministry Headquarters and the community at large may extinguish rather than reinforce the competent self-image of the teacher formed during her university training.

As efforts are being made by the Singapore government to encourage non-graduate teachers to take up further study at the University, and to ensure a good supply of expert teachers in the various disciplines for our schools, the above observation has become extremely significant. The question of providing for a healthy balance between the technical competence and the professional mind of the teacher must be considered or our education will not benefit by the high qualifications of its members. On the other hand, for teachers who may not have the chance to pursue studies beyond the high school level, they should not be made to feel inferior because of their low academic achievement. Instead of looking to their educational qualifications, attention should be directed to such areas as the work environment of the teachers, the nature of their job as well as other social

influences when seeking explanation for the work orientations of these teachers.

#### The Lack of Association Between Teaching Experiences and Women Teachers' Professionalism:

Contrary to the expectation of this study that women teachers' professionalism will increase with the length of service, the results show that no significant differences are found between professional orientations of women teachers with different lengths of teaching service. Nor does a rich work experience on the part of married women teachers appear to improve their opinions on their profession. However, there is evidence suggesting that length of service has an important bearing on teacher behavior. Experienced teachers are found to have attended more inservice courses, to have participated in more professional conferences and meetings, to have made more decisions in schools as well as to have held a longer membership in the teachers' union than the less experienced teachers. This will be discussed in detail in the next section. The present discussion will focus on the null relationship between the experience factor and teachers' professionalism.

A possible but paradoxical explanation for the findings is that the function of teacher experience has been somewhat overstated. Although the number of years a teacher spends with the profession may have borne upon the ways in which she goes about her work, it certainly does not affect her views of herself as a professional or her views on her profession at large. The neophyte and the less experienced teachers share with their most experienced colleagues the same ideas about what they should and should not do as professionals, despite their comparatively fewer opportunities to practise what they believe. To search for explanation for this phenomenon, the possible effect of teaching on the long service teachers perhaps should be scrutinized.

If, as Waller(1961) and Hargreaves(1978) contend, teaching does leave its mark on those who are in the profession and, that it does,

in Waller's own words, " whittle its followers to convenient size and season them to suit its taste "(27), what is reflected by the findings then, perhaps, is that the teaching service in Singapore is slow in promoting women teachers' professionalism. This, in its turn, is suspected to be the result of the confusion and bewilderment experienced by the teachers during their practice. As suggested by the report forwarded by the Singapore Teachers' Union, such bewilderment and confusion may have been due to the many and rapid changes taking place in our education system in the last ten years (STU, 1980). The incapability of our teachers to make adjustment to these changes because of lack of time has seriously affected their self-confidence as competent and experienced teachers.

The results have two significant implications for the educational administrators of Singapore. Firstly, if teaching experience is to be used as a yardstick to assess and reward teachers, to assign teachers to certain positions and responsibilities, care should be taken to see to it that those young but committed teachers would not be put at a disadvantage simply because of their lack of a long work record. Secondly, more studies have to be devoted to women teachers and their work in order to find out what teaching does to these teachers and the reason why the professional orientation of women teachers ceases to develop as the teachers grow more accustomed to their work.

#### Professional Orientations:

The overall mean of professionalism scores for women teachers in the study suggests that women teachers, as a whole, are moderate in their opinions with regard to the teaching profession. Like so many of their Western counterparts examined in the literature, these teachers give priority to the service ideal of their profession. They take great pride in their work by placing great emphasis on the indispensability of their service to society. A vast majority of them also agree that they would spend extra hours with students if needed, that they would disregard the school policy, the demands of the prin-

cial and the parents if the interests of the students are at stake.

As opposed to their strong orientation towards students, these teachers display relatively low trust in their colleagues. Although the teachers believe that teachers ought to join a professional organization and that professional journals contribute towards their expertise, only a small number of them regard the opinions of their colleagues favourably. Slightly more teachers agree that only their fellow teachers are qualified to judge their work. Teachers are equally divided on the question regarding whose respect should they most value as far as the task of teaching is concerned. Whereas less than half of the teachers indicate that it is important that their teaching qualities be respected by their colleagues, some suggest that it is the respect shown by the Ministry personnel that they seek. Still others believe that it is the opinions of their students that count. The little regard teachers show for the competence of each other, however, does not necessarily imply that they are less in support of the idea that competence is an important ingredient of a professional's role. Over two-thirds of the teachers oppose the deployment of unqualified staff in schools. They also endorse the role educational research and inservice courses play in developing their professional expertise.

Two reasons may suffice to account for these responses:

(1) The teacher shortage problem:

Schools in Singapore are experiencing a severe teacher shortage at present. The Ministry reports that there is a shortage of nine hundred teachers in primary education and some one thousand and eight hundred English graduate teachers in secondary schools and pre-university classes(28). As a result, either unqualified staff such as national servicemen and relief teachers are deployed or teachers are compelled to face a class and subject which they have neither the necessary skills nor the inclination to teach. This has led to the lack of faith on the part of the teachers in each other and their comparatively strong emphasis on inservice courses.

(2) Lack of a professionally-controlled sanctioning body:

The low interpersonal support found among the women teachers may also be explained by the lack of a professionally-controlled sanctioning body in the profession. Since teacher tenure and promotion are basically controlled in the hands of the educational administrators, it is no surprise that teachers should choose to look to their superiors for cues. Moreover, students also constitute a powerful force in minimizing peer influence in the teaching profession in view of the strong orientation women teachers show towards their student charges.

The attraction teaching has for women is once again sustained in the study. Nearly two-thirds of our women teachers indicate that they would stay in the profession until retirement and, that they would again choose to become a teacher if they have to make decision on their career again. Even more teachers cite "high ideal" as the reason why they joined the profession. However, when asked if they would still stick to their job if their salaries and holidays were reduced, many either express a feeling of uncertainty or give a negative answer. This, perhaps, could be understood in the light of the social trend in Singapore.

In Singaporean Society, the prestige of an occupation is usually measured by the salary and other fringe benefits enjoyed by its members. Criticisms in relation to these aspects of the teaching profession are not uncommon, after all. On this basis, a cut in their salaries and holidays would inevitably be regarded by these teachers as a threat to the already low esteem of their profession.

Deviating from the expectations of many anti-feminist critics that women are less oriented towards professional autonomy, women teachers in Singapore demonstrate high awareness with relation to their rights in classroom as well as in other professional aspects. An overwhelming number of these teachers believe that classroom teaching should be left entirely to teachers themselves. Even greater consensus is reached on their being consulted on new education

policies and on their right to select textbooks as well as supplementary teaching materials. On the other hand, these teachers report that they are less willing to defy school rules and regulations. Maybe, in schools where severe teacher shortage is reported, where confusion due to rapid changes prevails, to follow fixed rules and procedures is the only possible way to avoid bias and to maintain efficiency in practice.

The results also show that a mildly negative relation is found between the teacher's sense of calling and her autonomy orientation. That is, teachers showing high commitment to their profession may not be very insistent on professional autonomy, and teachers high in autonomy orientation do not always report high sense of calling. One tentative explanation for this phenomenon is that the love of the committed teacher for her work has overshadowed her desire for power. On the other hand, the teacher who attaches more importance to autonomy may become easily disillusioned when being frustrated in her quest for power.

In addition to those factors mentioned in the foregoing discussion, which may have resulted in the reservations teachers have for their profession, the crux of the whole problem seems to lie in the lack of systematic attention on the part of teachers to the problems of professionalization. Thus far, the ideas of professionalism have been disseminated chiefly by means of public addresses given by Ministerial members and workshops attended by only a handful of teachers; no systematic attempts have been made to draw teachers' attention to the problems of professionalization. This prevents teachers from working assiduously to move in this direction as the relationship between current practice and a more professional practice is not clearly worked out with teachers.

#### Professional Behavior:

Turning now to the self-reported behavior of the teachers,



women teachers seem unlikely to abide by all of their professional values. A low correlation between their professional orientations and reported behavior confirms this. Teachers' behavior scores indicate that inconsistency emerges in eight out of the ten criteria. Contrary to the view generally held by women teachers on the positive functions of research, inservice courses and educational journals in improving teaching, only a limited number of teachers report reading two or more research reports and professional journals regularly, or attending two to three inservice courses in the previous two years; a vast majority report attending one or no inservice course at all. The same can be said to their participations in professional activities organized by the teachers' organizations. When asked if they are members of the teachers' union(s) and of the length of their membership, only a handful indicate that they are long time members of the union(s), many report being either non-members or new members. Over four-fifths of the teachers never or seldom participate in activities organized by the union(s). Nor are they active in professional meetings and conferences. Women teachers are equally unproductive as far as publications are concerned. No teacher published or presented four or more articles during the previous two years. A large number of them report having no or limited contribution in this respect. Practically, women teachers do not have much opportunity of making decisions regarding professional matters in schools, irrespective of their agreement on their rights in certain professional domains. Only a small group of teachers report making decisions frequently, more than half of the teachers seldom or never make any decision in schools. The only two values which are consistently practised by the women teachers are values related to their commitment and service to the profession. Most of the teachers have never entertained the idea of seeking employment in another profession. They have spent more than eight hours a week doing professional work outside schools.

A general conclusion drawn from these results is that there is considerable discrepancy between ideology and practice in the teaching profession. Professional behavior, it is suspected, is a contingent

product not only of teachers' professionalism, but above all, of other situational factors. As suggested by the intricate pattern of interaction shown in Figure 5, the degree to which women teachers put their beliefs into practice is very much a mixed function of the amount of leisure time the teacher has after school, her education background and the length of her service. Experience of the teacher is of particular importance here, because a veteran teacher is more likely than a less experienced one to be given opportunities to make professional decisions, to attend inservice courses and to be engaged in activities organized by the teachers' union(s). Other factors that tend to discourage women teachers from living up to their beliefs are also speculated as follow:

\* Heavy workload of the teacher:

As suggested by a number of local and foreign studies ( Hilsum and Cane,1971; The Mentor,1979; STU,1980.), teaching is not an easy job. The workload of the teacher may infact be more intensive as compared to another profession's. Apart from the primary teaching tasks, the teacher is also expected to fulfil a wide range of non-professional duties which have gradually produced a distracting effect on the teacher's professional development. This is pointed out by the STU report and is further justified by the teachers' comments in the present study:

" Theoretically, the teacher is expected to be a professional but in practice, he (she) can be very distracted by numerous miscellaneous tasks from the buying of bus stamps for his (her) pupils to 'chasing hooligans away'. "(29)

\* The nature of inservice courses:

The many inservice courses organized thus far might not be inclusive enough to attend to the varied needs of the individual teachers or be sufficiently practical to solve their unique problems; hence, affecting their participation. Furthermore, difficulty of obtaining a full-time study leave due to the teacher shortage problem

also results in low course attendance on the part of the teachers.

- \* Lack of strong influence of the teachers' union over teacher professionalism:

Despite a myraid of activities organized by the teachers' union(s) in the past, women teachers, on the whole, display little enthusiasm. Although this may inpart be attributed to the divided attention of women teachers to work and other domestic functions, inability of these unions to surmount disunity and mistrust among members, to influence education practice, to press for better working conditions in schools as well as to secure memberships, especially those from the womem teachers, may also be blamed.

- \* The principal as a powerful determinant of teacher behavior:

The leadership style of the principal is also an important factor in influencing teachers' behavior in schools. Whether the principal is an authoritarian, a director or a mentor, a guide; whether he regards himself basically as an administrator or a professional would subsequently define the professional climate of the school. Furthermore, since many of the school principals are male, the degree to which they are identified with the unique views and positions of their women subordinates, hence, allowing greater flexibility in their practice would also contribute substantially to the promotion of professional behavior on the part of women teachers.

#### Recommendations:

This study has been concerned principally with identifying the professional orientations of women teachers in Singapore. It has highlighted problems which have a significant bearing on the promotion of women teachers' professionalism in schools. Listed below are some recommendations which may lead to an effective resolution of these problems:

- \* Maintaining a healthy balance between professional and marital commitment of women teachers:

The major barrier to women teachers' professionalism, as suggested by the study, comes from the marital obligations of the women teachers. The dual-role dilemma of women teachers is fundamentally a social phenomenon which has its roots in culture and upbringing, and must be recognized as real if education is to be professionalized. Certain initiatives need to be taken by the Ministry to minimize these domestic-occupational tensions of the teachers so that energy could be channelled into their work rather than being bound up in role conflict. Firstly, special child-care service should be arranged for women teachers given the fact that an overwhelming number of married women teachers in schools have pre-school children. Secondly, courses aimed at providing counsel on marriage and the division of labour in the home should be organized and attended by both women teachers and their spouses. Finally, married women teachers should be allowed a more flexible work schedule so that their professional obligations would not be in conflict with those of their familial roles.

- \* Encouraging research on the "real lives" of teachers in schools:

Educational research should not be confined to the study of classroom events only. Nor should it be unilaterally aimed at improving the examination results of the students. The real lives of the teachers in schools, their workload, the climate of the school, its formal and informal organization, all these demand scrutiny. Knowledge about these aspects of the school life not only confronts problems that faced by teachers in their daily practice, but it also provides information on the conditions under which professional growth of the teachers could be maximized. As Joyce points out, "without a considerable increase in knowledge about the nature of the lives of teachers, about the conditions that provide them with opportunities to learn and how these conditions can be changed, it will be virtually impossible to generate valid models of inservice activities and initiatives." (30)

\* Enforcing the link between the University and the school:

Though there is little evidence suggesting that tertiary education has an important impact on practising women teachers' professionalism, to abandon any tie between schools and the status-rich university simply based on such ground will be absurd and unwarranted. This is especially true in view of the current education policy. What is of immediate need of the profession is, perhaps, the reestablishment of a more positive relationship between the school and the University as well as the recapitalization on the strength of university courses. In order to achieve these goals, several steps need to be taken.

Firstly, the Institute of Education ought to be affiliated to the University, so that the producers of knowledge and the teacher trainers will be in a better position to work together and by their joined efforts, produce teachers who are more able to relate their knowledge to their profession, both psychologically and practically.

Secondly, both the academic staff and the teacher trainers need to maintain a high degree of awareness of what is actually going on in schools through school consultancy and research. This is to ensure that there is no gap between theory and practice.

Finally, teachers have to be involved in the process of knowledge production by being given the opportunity and necessary assistance from university staff to research into problems hampering their practice.

\* Promoting school-based inservice courses, seminars and workshops:

Ecologies of schools are heterogeneous rather than homogeneous. Needs of people in these schools also differ. The only way teachers could be motivated to take part in inservice courses, seminars and other professional activities is to have these activities focused on the substantive problems teachers face in their particular schools. These school-focused and school-based activities not only build upon the experience and expertise of the serving teachers for improv-

ing teaching, but by encouraging an exchange of views and expertise, and a cross-fertilisation of ideas among the participants, they also enhance the collegial relationship between the teachers.

\* Facilitating the reading of professional journals and research materials:

Since educational journals and research materials constitute an important source of professional knowledge and information, both teacher educators and the Ministry should see to it that our teachers do read beyond their school textbooks. In view of the lack of time on the part of the teachers as is indicated by their remarks in the study, and the length of many research reports as well as the technical jargon used in them, alternatives should be provided to facilitate the reading habit of the teachers. Fortunately, relevant actions are being taken now by the Institute of Education and the Ministry Headquarters to solve these problems. A series of research abstracts adopted from various educational studies will be published by a team of IE lecturers. These abstracts will be rid of technical and garbled terms and will prove to have a direct bearing in the classroom. It is hoped that by highlighting the relevant and useful ideas of teaching, by freeing teachers from hunting through the helplessly large collection of works on teaching, teachers can acquire the habit of reading professional publications.

\* Use of para-professionals in schools:

Para-professionals should be used in schools to discharge miscellaneous duties which are being undertaken by classroom teachers under the present system. These duties include taking student attendance, collecting school fees, giving science demonstrations and other clerical and mechanical tasks. The deployment of para-professionals in schools will help reduce the workload of the qualified teachers, thereby, enabling them to concentrate more on the professional aspects of their work. It will also make teaching less onerous, hence, attracting more people to the field.

\* Solving the teacher shortage problem:

To raise the quality of teaching and to restore the faith of teachers in each other, first and foremost, the teacher shortage problem has to be overcome. This can be achieved through the following ways. Firstly, teaching would become an attractive profession for those fresh graduates and outstanding school leavers if sufficient incentives, both intrinsic and extrinsic, could be provided. These may include putting up a nation-wide education programme which is aimed at promoting the awareness of the values and importance of the teaching profession on the part of the prospective candidates and increasing salary and fringe benefits which not only attracts those outside the profession, but also reduce staff turnover and wastage rates in the profession. Secondly, para-professionals, as mentioned above, could be used to relieve qualified teachers of non-professional duties so that they have more time to teach. Thirdly, service can also be tapped from those retired teachers who are not only possessed of good health, but also a strong interest in the profession.

\* Establishing a unified professional association:

Instead of having five teachers' unions in the profession, hence, the resultant segregation of teachers and their divided identification, a more powerful and unified association should be formed. As contrary to the non-compulsory membership system in the existing teachers' unions, teachers will become legitimate members of the new association. The move is to ensure a common base for the professional identity of the teachers and an effective voice for all teachers in matters concerning their practice.

\* Cultivating in the teachers a systematic understanding of the ideas of professionalism:

Before the women teachers make any substantial claim to professional status, they should be familiarized with the characteristics of what constitutes a profession and the likely strains imposed on them in professionalization. The best way to achieve this goal is

through planned seminars, workshops and school-based courses as well as through opportunities to practise what is being preached.



## CONCLUSION

This study has sought to ascertain the views of women teachers of different marital status, educational levels as well as experiences on the various aspects of professionalism. It is clear that no significant difference in opinions are found among the various groups of teachers except for those classified by marital status. As expected, single women teachers are found to be more professionally oriented than the married ones. Inconsistency is also discovered between the women teachers' beliefs and their behavior.

The influence marriage wields over the professional orientation of women teachers and the generally moderate support the ideology obtains from women teachers as a whole have suggested that the chance for women teachers to become militant professionals is somewhat slim in the near future. Unless adequate actions could be taken to allow these teachers an unambiguous concept of professionalism and solutions to problems cropped up in their quest for the ideology, to provide the social support necessary for their work commitment, and to ensure a work environment in which ideals and practice can be bridged and in which women teachers can gauge themselves positively, the status of teaching will not be improved. These, in turn, depend to a very large extent on the collaborating efforts of the various segments in the profession. The educational administrators, the university staff, the teacher trainers as well as the teachers themselves, all of them are seen having an important part to play in promoting teacher professionalism. Perhaps, it should be remembered that the destiny of the teaching profession is controlled in the hands of its members, no one could really fight the case of teachers except those in the profession.

NOTES

- (1) An address delivered by the Deputy Prime Minister, Dr. Goh Keng Swee at the gathering jointly organized by the five teachers' unions and the Ministry of Education on the eve of Teachers' Day, 1979. *The Mentor*, Vol. 8, No.3, October, 1979.
- (2) Khoo, C.K. *Census of Population 1980 Singapore*. No.4: Economic Characters. Department of Statistics, Singapore, 1981.
- (3) Carr-Saunders, A.M. and P.A. Wilson, *The Professions*. London, Frank Cass and Co. Ltd. 1964. P.497.
- (4) Tan, T. Teaching as a Profession. *The Mentor*. Vol.8, No.11, October, 1980. P.6.
- (5) Sia, K.S. We Are Harvesters of Human Potential. *The Mentor*. Vol.9, No.7. August, 1981. P.7.
- (6) Neal, L.F. Elaborate Barbarism. *Education News*. Vol.15. No.9. 1976.
- (7) Attitude-- the Hallmark of Professionalism. *The Mentor*. Vol.8. No.1. June, 1979. P.4.
- (8) Sia, K.S. The Teaching Profession In Terms of Professional Responsibilities and Competence. *The Mentor*. Vol.8. No.1. June, 1979. P.6.
- (9) Tan, T. op, cit. P.7.
- (10) Snizek, W.E. Hall's Professionalism Scale: An Empirical Re-assessment. *American Sociological Review*. Vol.37. February, 1972. P. 109.
- (11) Corwin, R. *Militant Professionalism: A Study of Organizational Conflict in High Schools*. New York, Meredith Corporation, 1970. P.75.

- (12) Lieberman, M. Education as a Profession. N.J. Prentice-Hall, Inc. Englewood Cliffs. 1956. P.484.
- (13) Corwin, R. op,cit. P.51.
- (14) ibid. P.52.
- (15) Lortie, D. The Balance of Control and Autonomy in Elementary School Teaching. In Etzioni, A.ed. The Semi-professions and Their Organization. The Free Press. 1969. P.35.
- (16) Corwin, R. op,cit. P.51.
- (17) Etzioni, A. op,cit. P.xv.
- (18) Lieberman, M. op,cit. P.252-253.
- (19) Lortie, D. School Teacher: A Sociological Study. Chicago, The Chicago University Press, 1975. P.86-87.
- (20) Etzioni, A. op,cit. P.203.
- (21) For examples, see Peterson, E. in ibid, P.208; Tropman, J.E. The Married Professional Social Worker. Journal of Marriage and the Family. 30, 1968. P.661-665.
- (22) Meek, H. Women in NZEI. National Education. Vol.63. No.652. October, 1981. P.176.
- (23) Ward, S. Women in Education. In Lebra, J. and J. Paulson eds. Chinese Women in South-east Asia. Singapore, Times Books International, 1980.
- (24) Kelsall, R.K. Teaching. In Silverstone, R. and A. Ward, eds. Careers of Professional Women. London, Croom Helm, 1980.
- (25) That the lowest interval in the table begins with the score value of 52 even though the lowest score in the empirical study is 53 can be accounted for by the conventional method of constructing class intervals by which the lowest class interval

is usually started at a score value evenly divisible by the size of the interval. (  $52 \div 2 = 26$  )

- (26) In Berliner, D.C. (ed.) Review of Research in Education 8. Chapter Three. American Educational Research Association, 1980.
- (27) Waller, W. The Sociology of Teaching. New York, Russell and Russell, 1961. P.375.
- (28) The Sunday Times, February, 7 and March,14, 1982.
- (29) Singapore Teachers' Union. Perception and Practice in Education. Singapore, 1980. P.125.
- (30) Joyce, B. The Ecology of Professional Development. In Hoyle, E. and J. Megarry, eds. Professional Development of Teachers. World Year Book of Education, 1980. New York, Kogan Page, London/ Nichols Publishing Co. 1980. P.27.

APPENDIX AQUESTIONNAIRES

Dear Teachers,

The purpose of this survey is to elicit the feelings and attitudes of our women teachers towards their profession. The questionnaire should be answered in light of the way you yourself both feel and behave as a teacher.

The questionnaire contains three sections. ALL SECTIONS MUST BE COMPLETED.

Please be patient and truthful. This questionnaire must be answered carefully, seriously and accurately. There is nothing personal about this survey, your name has been picked entirely at random. Your identity will be kept confidential.

This questionnaire should be returned to your principal by 30th, Jan. 1982.

Your cooperation will be very much appreciated.

Thank you.

Section I: Please answer all items.

Age: \_\_\_\_\_

Marital status:      Married                       Single   
                                  Divorced                       Widowed

(Please tick the appropriate box)

If married, number of children: \_\_\_\_\_

age of children: \_\_\_\_\_

My highest qualification: Academic/University \_\_\_\_\_  
    Professional \_\_\_\_\_  
    Others (please specify) \_\_\_\_\_

Level taught in school: \_\_\_\_\_

The year I entered the service: \_\_\_\_\_

The year I completed my professional training (i.e. Cert. Ed.) \_\_\_\_\_

Section II: There are five possible responses to each item in this section. Please mark the appropriate response by ticking the appropriate box. Please answer all items, making sure that you have NO MORE THAN ONE RESPONSE FOR EACH ITEM.

	Strongly Agree	Agree	Un-decide	Dis-agree	Strongly Disagree
1. I believe that educational research should be a compulsory subject in the training of teachers.					
2. I would stay in the profession until my retirement.					
3. I believe that my service is essential for and vital to society.					
4. I believe that teachers should be members of at least one professional teaching association and participate actively in its activities.					
5. I believe that only teachers have the right to determine what should or should not be done in the classroom.					
6. I believe that national servicemen should not be deployed in schools.					
7. I would stay in the profession even if my salary were reduced and fewer holidays were offered.					
8. I would spend extra hours with students if required, even if it means less time for my family, friends and recreational activities.					
9. Professional journals contribute tremendously to improving my teaching skills.					

	Strongly Agree	Agree	Un-decide	Dis-agree	Strongly Disagree
10. I would like to be consulted on new educational policies prior to their implementations.					
11. I would like to see more inservice courses or training programmes offered to me on a regular basis.					
12. I would again choose to become a teacher if I were given the opportunity to start my career all over again.					
13. I would not follow what is prescribed by the school policy if I believe that there is a better way of helping the student.					
14. The opinions of my colleagues are always right and proper and I would try my best to live up to their expectations.					
15. Whatever decisions I make should not take into consideration the school regulations and procedures.					
16. It is more important that my teaching qualities are respected by my colleagues than by my employing authority.					
17. I entered teaching because I have some high ideal with respect to the education of our young.					

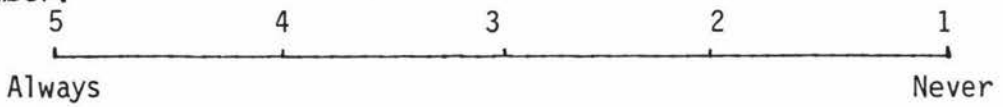


	Strongly Agree	Agree	Un-decide	Dis-agree	Strongly Agree
18. I would disregard the demands of my principal and the parents to promote any student if I believe that promotion would do more harm than good to the student.					
19. Only my colleagues, not other Ministry personnel or parents are qualified to judge my work.					
20. I believe that teachers should be given authority in selecting textbooks and supplementary materials.					

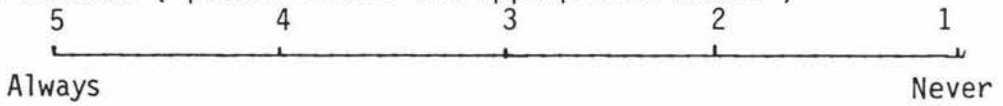
Section III: Please answer all questions.

1. How many research reports do you read regularly? \_\_\_\_\_
2. How many inservice courses have you attended in the last two years? \_\_\_\_\_
3. Have you ever tried to seek employment in another occupation? \_\_\_\_\_
4. How many hours a week do you spend on professional work (e.g. planning, marking etc.) outside the school? \_\_\_\_\_
5. How many education or related journals (e.g. Journal of Education for Teaching, Journal of Applied Educational Studies ) do you read regularly? \_\_\_\_\_
6. How many professional meetings and conferences have you attended in the last two years? \_\_\_\_\_
7. How many articles or papers have you published in educational journals or presented to conferences and courses in the past two years? \_\_\_\_\_
8. Are you a member of the teachers' union(s)? if yes, please state the number of years in the organization. \_\_\_\_\_

9. Please indicate the frequency of participations in activities organized by the teachers' union(s) by circling the appropriate number.



10. How often do you make decisions regarding professional matters in school? ( please circle the appropriate number )



親愛的教師們：

此抽樣調查的目的是為了探求我國教師們對其職業的看法。此問答卷分為二組。您對每一組的問題均需作答。您的身分將被保守絕對的祕密。請您在本月廿日以前將此問答卷填妥，交還給貴校校長。

謝謝您的合作。

甲組：請回答所有下列的問題。

年齡：\_\_\_\_\_

婚姻狀況：

已婚

未婚

離婚

寡居

(請在適當的空格內作“√”的符號)

如已婚，孩子的人數：\_\_\_\_\_

孩子的年齡：\_\_\_\_\_

我最高的學歷：

大學程度

\_\_\_\_\_

專科資格

\_\_\_\_\_

其他(請說明)

\_\_\_\_\_

我所教的班級：\_\_\_\_\_

我參加教育服務的年度：\_\_\_\_\_

我完成師資訓練的年度：\_\_\_\_\_

乙組：在這一組中，每一問題都有五個可能的答案。請選擇一個適合您的答案，並在空格內作“√”的符號。

	强烈 同意	同意	不能 决定	反对	强烈 反对
1. 我认为教育研究应被列为教师训练中的必修课程。					
2. 我将留在教育界直到或退休为止。					
3. 我相信我的工作对社会是很重要的。					
4. 我认为教师必须是教师工会的成员, 并应积极参与其活动。					
5. 我认为只有教师才有权利决定课堂里应进行的活动。					
6. 我认为国民服役青年不宜担任教师的职务。					
7. 即使我的薪金和年假被削减, 我也会留在教育界。					
8. 我愿意为学生付出额外的时间, 纵使这会影响我与亲人、朋友相聚的时间。					
9. 教育杂志对提高我的教学水平, 贡献很大。					
10. 在推行新教育政策之前, 我认为教育部应先征求我的意见。					
11. 我愿意接受更多的在职训练。					
12. 如果要我重新选择职业, 我将再度选择教师一职。					
13. 如果我相信有更有效的途径帮助学生, 我将不追随学校的政策。					
14. 我的同事的见解经常是准确的, 而我也会竭尽所能以达到他们的期望。					

	强烈 同意	同意	不能 决定	反对	强烈 反对
15. 我对教学所作的决定将不会考虑到校规与行政。					
16. 其他教师对我教学的评估将比教育部对我的评估来得重要。					
17. 我参加教育服务是因为我对培养下一代有着崇高的理想。					
18. 如果我认为校长或系主任对学生升留问题的决定对学生的前途没有裨益, 我将不遵从。					
19. 只有我的同事才有权利评估我的教学。					
20. 我认为教师应有权选择所用的教科书和辅助教材。					

丙组：请回答下列所有的问题。

- 你经常阅读的有关教育研究的报告有几篇(篇)? \_\_\_\_\_
- 在正去的两年内, 你曾参与多少次的外职训练? \_\_\_\_\_
- 你是否尝试过寻找其他工作? \_\_\_\_\_
- 在校外, 你每个星期花费多少时间从事阅卷和设计教学的工作? \_\_\_\_\_
- 你经常阅读的教育杂志有几本? \_\_\_\_\_
- 在正去的两年中, 你曾参与多少次教育研讨会? \_\_\_\_\_
- 在正去的两年中, 你曾刊登过多少篇有关教育的文章? \_\_\_\_\_
- 你是教师工会的成员吗? \_\_\_\_\_  
如果你是教师工会的成员, 你参加多久了? \_\_\_\_\_
- 你经常参加教师工会所举办的活动吗?  
(请在适当的空格内作“√”号) 很少参加  经常参加  从未参加   
偶尔参加  从未缺席
- 在校, 你时常有机会参与决策吗?  
(请在适当的空格内作“√”号) 很少  常常  没有   
偶尔  常常

APPENDIX BANALYSIS OF RESPONSES: PROFESSIONALISM SCALE

Item number	Number of respondents scoring					Range	Mean scores
	1	2	3	4	5		
1	2	25	41	147	51	1 - 5	3.83
2	5	11	76	114	60	1 - 5	3.80
3	0	3	3	117	143	2 - 5	4.50
4	4	46	51	138	27	1 - 5	3.52
5	4	46	12	133	71	1 - 5	3.83
6	4	47	55	101	59	1 - 5	3.62
7	30	62	102	62	10	1 - 5	2.85
8	6	15	33	180	32	1 - 5	3.82
9	5	48	50	131	32	1 - 5	3.52
10	0	6	21	147	92	2 - 5	4.22
11	2	12	41	150	61	1 - 5	3.96
12	3	29	62	111	61	1 - 5	3.74
13	3	38	46	152	27	1 - 5	3.61
14	21	140	37	57	11	1 - 5	2.61
15	52	177	29	6	2	1 - 5	1.98
16	12	96	42	90	26	1 - 5	3.08
17	0	22	27	171	46	2 - 5	3.91
18	7	54	62	119	24	1 - 5	3.37
19	19	121	54	59	13	1 - 5	2.72
20	0	3	5	130	128	2 - 5	4.44

ANALYSIS OF RESPONSES: BEHAVIOR SCORES

Item number	Number of respondents scoring			Range	Mean score
	1	2	3		
1	226	30	10	1 - 3	1.19
2	230	34	2	1 - 3	1.14
3	23	4	239	1 - 3	2.81
4	18	36	212	1 - 3	2.73
5	222	41	3	1 - 3	1.18
6	189	45	32	1 - 3	1.41
7	263	3	0	1 - 2	1.01
8	190	17	59	1 - 3	1.51
9	255	10	1	1 - 3	1.05
10	156	63	47	1 - 3	1.59

APPENDIX C

SCHEFFÉ'S TEST: BEHAVIOR SCORES BY EXPERIENCE

The formula:

$$t_{\text{observed}} = \frac{\hat{C}}{\sqrt{MS_W \left( \frac{w_1^2}{n_1} + \frac{w_2^2}{n_2} + \dots + \frac{w_k^2}{n_k} \right)}}$$

$$t_{\text{critical}} = \sqrt{(K-1) F_{\text{crit.}} (\alpha, K-1, df_W)}$$

Where  $\hat{C}$  = value of the contrast

$MS_W$  = mean square within group (error)

$K$  = number of groups

Contrast 1:  $\bar{X}_a \neq \bar{X}_b$

$$t_{\text{observed}} = \frac{(-1)(14.573) + (0)(16.526) + (+1)(15.575)}{\sqrt{4.25 \left( \frac{(-1)^2}{82} + \frac{(+1)^2}{87} \right)}}$$

$$= \frac{1.002}{\sqrt{0.085}}$$

$$= 3.455$$

Contrast 2:  $\bar{X}_b \neq \bar{X}_c$

$$t_{\text{observed}} = \frac{(-1)(15.575) + (0)(14.573) + (+1)(16.526)}{\sqrt{4.25 \left( \frac{(-1)^2}{87} + \frac{(+1)^2}{97} \right)}}$$



$$\begin{aligned}
 &= \frac{0.951}{0.29} \\
 &= 3.279
 \end{aligned}$$

Contrast 3:  $\bar{X}_a \neq \bar{X}_c$

$$\begin{aligned}
 t_{\text{observed}} &= \frac{(-1)(14.573) + (0)(15.575) + (+1)(16.526)}{\sqrt{4.25 \left( \frac{(-1)^2}{82} + \frac{(+1)^2}{97} \right)}} \\
 &= \frac{1.953}{\sqrt{0.085}} \\
 &= 6.734
 \end{aligned}$$

Let  $\alpha = 0.05$

$$\begin{aligned}
 t_{\text{crit.}} &= \sqrt{(3-1)(3.04)} \\
 &= \sqrt{6.08} \\
 &= 2.47
 \end{aligned}$$

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