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Modernization, stress, and psychopathology in Tunisian women

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University of Hawaii, 1987

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MODERNIZATION, STRESS, AND PSYCHOPATHOLOGY
IN TUNISIAN WOMEN

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ABSTRACT

As technological advances in science, agriculture, transportation, and information systems are affecting the world at unprecedented speeds, and individuals are often being forced to accept and adapt to the resulting changes, numerous disciplines have begun to investigate the effects of modernization on individuals, groups, and societies. In particular, researchers in cross-cultural psychology and psychiatry have been exploring the relationship between modernization and psychopathology. Although the literature on this topic has steadily increased during the last few decades, several lacunae are apparent, including the investigation of normal (i.e. non-psychiatrically hospitalized) Arab populations, and women in Arab and non-Arab developing nations.

The present study attempted to answer some of the questions that arise from the paucity of knowledge on the topic of stressors, problem solving efforts, and psychopathology in non-hospitalized Arab women. The interactional model of psychopathology was used to conceptualize the effects of stressors and problem solving efforts on psychopathology. Modernization was defined according to Lerner's (1968) definition as the primarily economic "process of social change whereby less developed societies acquire characteristics common to more developed societies", and one which is "activated by international, or intersocietal, communication" (p.386). Modernization was classified into three progressively increasing levels- rural, village, and urban habitation- for the 45 Arab Tunisian women interviewed.

Stressors were assessed by subjective reports of the occurrence and
severity of problems in 11 general areas, including any additional problems added by the women, and objective interviewer ratings of each problem as chronic or incidental. Problem solving efforts were measured by a checklist of 22 strategies compiled to include one or more from each of the coping categories outlined by Stone and Neale (1984), and to be appropriate for Tunisian women. The problem solving effort score was a strictly quantitative summary score of the strategies checked by each woman, plus any additional items she added.

Psychopathology was measured using the Symptom Checklist-90 (SCL-90) symptoms for somatization, anxiety, depression, and psychoticism, with specific modifications for Tunisian female subjects. Due to the inappropriateness of the Western rating system with this sample of mostly illiterate women, only the presence or absence of each symptom was rated to form a summary score for each symptom category.

Two sets of analyses were conducted. For the first set, a multivariate analysis of variance (manova) was performed for the effects of modernization on stressors, problem solving efforts, somatization, anxiety, depression, and psychoticism, followed by one-way analyses of variance (anova's) for each of the dependent variables, and t-tests when significance was found. The second set of analyses consisted of a canonical analysis of the effects of modernization, stressors, and problem solving efforts together on the psychopathological symptoms together. Results of the first set showed a significant effect of modernization for the manova \( F(12,74) = 2.89, p<.01 \) followed by the findings that modernization significantly affects stressors \( F(2,42) = 3.70, p<.05 \), problem solving efforts as measured by the instrument used
(F(2,42) = 13.17, p<.001), and depression (F(2,42) = 3.82, p<.05), with
the rural group scoring significantly higher than the urban group on
stressors (t(42) = 3.80, p<.05), and significantly higher than both the
village and urban groups on problem solving efforts (t(42) = 7.07,
p<.001, and t(42) = 4.99, p<.01, respectively) and depression (t(42) =
3.29, p<.05, and t(42) = 3.47, p<.05, respectively). Results of the
canonical analysis showed a significant relationship between the
independent variables and the dependent variables (Wilks Lambda F(12) =
2.50, p<.01), with 84% of the variance in the psychopathological symptoms
accounted for by modernization, stressors, and problem solving efforts.

Two tentative conclusions are drawn from these findings. The first
conclusion is that when poverty is considered an integral element of a
lack of modernization, which is the case for the rural women, then less
modernization with its concomitant poverty seems to be associated with
higher stressor levels, a greater number of specific problem solving
strategies used (as measured by this instrument), and more reported
depression symptoms. These deleterious effects are most likely linked to
the poverty which occurs along with the lack of modernization in the
rural settlement. The second conclusion is that when one compares only
the economically similar middle-class to lower middle-class village and
urban groups, there appears to be no significant effect of modernization
on stressor levels, the number of problem solving efforts employed, nor
on the number of reported symptoms of somatization, anxiety, depression,
and psychoticism.

These results and conclusions point to the potentially beneficial
effects of modernization for rural women who have been bypassed by the
current social reform programs in Tunisia, and at the least, show no significant negative effects on the variables measured for middle-class village and urban women. However, the point is made that this study is a pioneering effort in the investigation of mental health in normal Tunisian women, and as such, poses more questions than it answers. Future research must begin to address the effects of modernization and tradition on larger groups of women, in a variety of developing countries, and on a variety of other dimensions, including other types of psychopathology as well as life expectations, divorce, alternative lifestyles, self-concept, and child-rearing practices.
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INTRODUCTION

As technological advances in science, agriculture, transportation, and information systems are being made at a speed unprecedented in the history of the world, human beings are being asked, and in many instances forced, to accept and adapt to the ensuing changes. Important questions have arisen from the recognition that these changes are affecting societies all over the globe. During the last few decades in particular, researchers in the fields of psychology, psychiatry, sociology, and anthropology have begun to study a collection of variables called "culture". Although each discipline has its own body of literature and methodology, all are interested in the effects of culture, as the context for social similarities, differences, and change, on individual and group behavior.

The study described herein involves an investigation of the effects of social change, or more specifically modernization, on women living in three distinct areas of the developing nation of Tunisia. As these rural, village, and urban areas are characterized by increasingly greater exposure to and integration of modernizing influences, the opportunity for comparing the effects of differing degrees of modernization on women's psychological health is utilized.

Because the origin of the proposed study is in cross-cultural psychology, a brief discussion of the purposes and development of this field is provided first. Next, the more specific topic of modernization and stress is discussed, along with an outline of the interactional model of stress and psychopathology as a useful model for conceptualizing the effects of stressors and problem solving efforts on the psychological
health of the individual. As the literature review shows, conclusions about the effects of modernization and social change vary, certain cultures have been relatively ignored by researchers, and the individuals studied have typically been male.

The Arabic culture of Tunisia is proposed as one which has been given little attention by psychologists and social science researchers, but, because of its government's present commitment to modernization, provides an ideal setting for studying the effects of modernization at different levels. In order to acquaint the reader with the customs and culture of Tunisia, a discussion of Arab culture introduces the literature review of current psychiatric research in the Arab world. As all of the Arab nations are to some extent experiencing the effects of modernization, the review provides an overview of the findings on the impact of modernization on the manifestation and epidemiology of psychiatric disorder in the Arab world. This introductory portion of the paper concludes with a summary of the unique geographic, political, economic, and educational features of Tunisian society, the social position of women in that country, and general methodological problems inherent in conducting research on Arab women.

The final portion of this paper consists of a statement of the research problem, a description of the methodology and results, and a discussion of the conclusions of the study. Using the interactional model of stress and psychopathology to conceptualize the problem, analyses were conducted to assess the impact of modernization on stressors, problem solving efforts, and psychopathological symptoms, and to assess the relationship between one group of variables consisting of
modernization, stressors, and problem solving efforts, and a second group of variables consisting of the psychopathological symptoms. Descriptive statistics, a qualitative narrative, and statistical analyses (multivariate and one-way analyses of variance and a canonical analysis) were employed.

Although this study lies more in the realm of pure than applied research, it opens the possibility of future social interventions designed to alleviate the distressing effects of modernization and/or tradition. But before such interventions can be planned and implemented, the effects of modernization on stressors, problem solving, and psychopathology must be elucidated, especially with regard to women (who have often been excluded from this type of research), in order to determine whether modernization is truly as disturbing as researchers have often assumed, or whether only certain aspects of modernization are stressing, and if the latter, then which of those aspects are the distressing ones. The present study does not attempt to answer this second question specifically (i.e. with regard to the differential effects of social class, education, urbanization, and industrialization), but does aim towards an explanation of the stressors, problem solving efforts, and psychological health of Tunisian women experiencing different levels of modernization. It is the researcher's hope that the information yielded by this study will be useful for future social interventions designed to improve the condition of all Tunisian women.

Cross-Cultural Psychology

In his review of a series of articles published in the Newsletter of the International Association for Cross-Cultural Psychology, Lonner
(1979) discussed several questions concerning the purposes of cross-cultural study. These questions asked whether cross-cultural psychology is only a particular method for finding universal psychological principles, (i.e. "a goldmine for theory-testing"), a way in which to improve living conditions in certain cultures and the world, or a combination of these purposes (p.33). Lonner concluded that both purposes are legitimate and necessary. The application of new techniques designed to help people often leads to questions and problems which basic research may solve. In this way, pure and applied research can interact to improve the welfare of individuals within the context of their own environments- an approach which is especially necessary in psychopathology.

The development of cross-cultural psychopathology can be divided into four main periods: "(a) Pre-1900, (b) 1900-1950, (c) 1950-1970, [and] (d) 1970 and beyond" (Marsella, 1979, p.234). Prior to 1900, an interest in societal influences on the individual began during the age of romanticism, with a particular emphasis on the evils of civilization. Jean Jacques Rousseau epitomized the predominant view in his belief that individuals are "good", but society makes them "bad". However, few, if any, systematic investigations of the negative effects of society on the individual were conducted during this period.

Between 1900 and 1950, the study of mental disorder and culture developed in two directions. First, investigations were conducted of supposedly "non-Western" disorders in particular cultures, such as pibloktoq in Arctic Eskimos, latah and amok in Asians, and mali-mali in Filipinos, and of "Western" disorders in non-Western cultures (see
Marsella, 1979, for specific studies). Secondly, the first epidemiological studies were conducted in an effort to determine the prevalence of mental disorder in various countries (e.g. Faris & Dunham, 1939). Also during this period, Freud (1922) wrote Civilization and Its Discontents, in which he blamed society for mental illness.

From 1950 to 1970, the number of epidemiological studies increased rapidly. In addition, more specific studies were conducted on the role of culture in mental disorder, and its definition and treatment in Western and non-Western societies (e.g. Yap, 1951; Kiev, 1964). Also, journals concerned with cross-cultural issues in mental illness were founded, including Transcultural Psychiatric Research Review, and the International Journal of Social Psychiatry.

Finally, Marsella (1979) has suggested that two trends have been developing during the most recent period, from 1970 to the present. The first trend is towards an examination of previous assumptions concerning the universality of Western definitions of mental disorder (e.g. Kleinman, 1977). The second trend is towards an interest in how specific disorders, such as schizophrenia, differ cross-culturally (e.g. the WHO-NIMH project, Sartorius, Jablensky, & Shapiro, 1978).

One of the basic premises of recent work on culture and mental disorder is that "persons and groups undergoing social and cultural change will experience a certain amount of psychological discomfort" (Berry & Annis, 1974, p.382). However, the definitions of "social and cultural change" and "psychological discomfort" vary, depending on the theoretical approach. Cultural change has been equated with modernization, acculturation, and the more specific processes of
industrialization, urbanization, and Westernization. Concomitantly, psychological discomfort has included the concepts of psychosomatic stress, psychopathological symptoms, personal adjustment, and acculturative stress (Berry & Annis).

Modernization, a form of cultural change, is not a discrete event; it must be considered a process. Lerner (1968) defined modernization as "the process of social change whereby less developed societies acquire characteristics common to more developed societies", and one which is "activated by international, or intersocietal, communication" (p. 386). He traced the evolution of the term beginning with the old names used to describe the transmission of images of the future by the imperialist colonizers to their colonies, including the reference to India as being Anglicized and Indochina as Gallicized. As similarities between the various imperialist nations became apparent, people began to refer to this process as one of Europeanization, and with the advent of the American influence, the more general term Westernization was used more frequently. Still, the term Westernization did not include the transfer of cultural information from non-Western societies such as the U.S.S.R. to Western nations. Thus, the term modernization evolved as a more precise way to speak of the process of social change involving cultural transfers, the core of which is economic development.

Lerner went on to define the characteristics of modernity, including "(1) a degree of self-sustaining growth in the economy", "(2) a measure of public participation in the polity"; "(3) a diffusion of secular-rational norms in the culture"; "(4) an increment of mobility in the society- understood as personal freedom of physical, social, and
psychic movement; and (5) a corresponding transformation in the modal personality that equips individuals to function effectively in a social order that operates according to the foregoing characteristics" (p.387). Obviously, these features of the modern or developed society are disputable, (and in some cases controversial), but they do provide a description of the general characteristics of modernity, with an emphasis on the economic aspects of the process of modernization.

The effects of modernization on the developing culture and its members are studied from a variety of perspectives. Economists study the effects of modernization on G.N.P., per capita income, and industry. Political scientists examine the results in terms of power, for example, within political systems. And sociologists investigate the effects of modernization on literacy rates, living conditions, and social institutions (Marsella, 1978).

The focus of interest for this project is on the psychological effects of modernization on the individual, although information concerning economic, political, and sociological conditions will be included as important aspects of the process. Obviously, a culture's economic resources, political system, and social institutions affect its members, just as those members influence the course of economic, political, and social developments.

In an overview of the literature on modernization in traditional cultures, Marsella (1978) outlined five areas of study on the psychological effects of modernization on the individual. These areas include cognitive functioning, perception, attitudes and values, self-concept, and psychological disorder. The latter area, concerning
mental health and disorder, has been the most popular in terms of the number of studies conducted. Beginning in 1940 with Linton's study of acculturation in American Indians, followed by reviews on the relationship between culture change and mental illness (e.g., Murphy, 1961; Spindler & Spindler, 1963), the idea that culture change, or modernization, could result in higher levels of psychological distress and disorder was accepted. Subsequent studies confirmed this hypothesis (Chance, 1965; Cawte, Bianchi, & Kiloh, 1968; both in Marsella, 1978).

However, in 1964, Fried wrote a review which only partially confirmed the link between modernization and psychological disorder. He found "no marked change in rates of psychiatric hospitalization for psychoses" for "large-scale continuous changes in 'modernization' in industrial countries", in "civilian populations during war", and "during severe economic depression". He did note that "with varying degrees of certainty" an increased rate of psychiatric hospitalization is apparent among "recently acculturated individuals who are also separated from their culture of origin", "foreign migrants in specific conditions", and "second-generation off-spring of foreign migrants" (p. 13). Fried's results must be considered in view of the specificity of the definition of psychological disorder, that is, psychiatric hospitalization for psychosis, and the fact that this measure does not account for other disorders.

One other study must be mentioned for its apparent contradiction to those works previously discussed. In an extensive study of psychosomatic symptoms in males living in six different developing nations, Inkeles and Smith (1970) found no consistent relationship between psychosomatic
scores and modernization variables (e.g. education, media exposure, and factory employment). Based on their data, they conclude, "Whatever may cause psychosomatic symptoms in younger men in developing countries, it is apparently something other than exposure to the modernizing institutions such as the school, the factory, the city, and the mass media...[and]... there is no evidence that migration itself brings about psychic distress as measured by the development of a large number of psychosomatic symptoms" (p.109). These results are certainly interesting and important, but considering the differences between lifestyles and roles of men and women in developing countries, the representativeness of this sample (of employed men only) with regard to women is questionable at best.

In conclusion, as Berry and Annis note, "the general consensus appears to be that there exists an association between sociocultural change and mental health" (p.382). Furthermore, in recent years the study of modernization has become more sophisticated with the identification of particular aspects of the process which result in stress, including value identification (Fabrega & Wallace, 1968), role discrimination (Dohrenwend & Dohrenwend, 1969), goal-discrepancy (Marsella, Escudero, & Brennan, 1975), and others. (For a more detailed review of types of stress and stressors studied in the area of modernization, see Marsella, 1973).

Stress and Psychopathology

Although studies on the relationship between modernization and psychological disorder began much earlier, the term "stress" was not well-known until the 1950's (Wolff, Wolf, & Hare, in Marsella, 1982).
Subsequently, an abundance of research on the topic was published in a variety of disciplines. Most notable among this work was that of Hans Selye, who proposed the "general adaptational syndrome" as a universal human response pattern to stressors.

However, as Marsella and Snyder (1981) noted, two further conditions were necessary to account for specific disorders— a generalized response pattern theory, and a specific response pattern theory. Researchers have differed in their theoretical explanations of the latter, emphasizing "(1) genetic weaknesses, (2) acquired vulnerabilities, (3) acquired organ-emotional response patterns", (4) "personality pattern determinants", and (5) "organismic-situational interactions" (Marsella, 1982, pp.241-242).

The most comprehensive explanation in regard to both person and environmental variables is the organismic-situational interactions theory. As Marsella (1978) noted, "No individual exists apart from a socio-cultural milieu and it is the interaction between the individual and this socio-cultural milieu that is responsible for behavior" (p.131). This interactional model of psychopathology, as described by Marsella (1982), provides a useful model for conceptualizing the relationships between stressors, problem solving efforts, and psychopathology in the proposed investigation. A description of the model follows.

**The Interactional Model of Stress and Psychopathology**

The interactional model of psychopathology emphasizes the importance of both person components (represented by the coping or support dimension), environmental components (i.e. stressors), and their
interaction (in the form of stress states). Psychopathology is considered a maladaptation to those stress states which result from the interaction of stressors and supports. All of the components are complex, and thus, Marsella (1982) has detailed the various categories of each.

The first component, the individual, may be conceptualized as a "coping response system", functioning at biological, sociological, and psychological levels. Examples of coping mechanisms, or supports, at the biological and sociological levels are good health, and a supportive social network, respectively. Four common types of psychological coping mechanisms are religion, self-directed behavior, projection, and optimistic fatalism (Marsella, Escudero, & Gordon, 1972).

The second component, the stressor, is defined as "any event/object/process which elicits a state of change in an organismic system" (Marsella, 1982, p.242). Stressors can be described along three dimensions: (1) category, (2) content, and (3) stressor descriptors. Categories include areas of life functioning (such as employment, housing, and marriage) from which stressors originate. Content refers to the quality of those stressors, for example, conflict between modern and traditional values, or frustration due to unattainable goals. Stressor descriptors simply delineate the measurable aspects of the stressor, such as its frequency, duration, and intensity.

The third component, stress or stress states, refers to "the organismic experiential conditions that emerge from the interaction of stressors and supports" (p.243). Stress states can also be described in terms of category, content, and descriptors. Although the descriptors
for stress states are similar to those for stressors (e.g. frequency, duration, etc.), category and content are defined differently. Stress state categories are biological, psychological, and sociological, and stress state content includes the three parameters of "(1) system overload-system underload, (2) positive-negative, and (3) high arousal-low arousal" (p.244).

In summary, the interactional model proposes that stressors and supports interact with (and affect) stress states, and that the individual's maladaptation to those stress states results in psychopathological symptoms and behaviors. Furthermore, stress is seen as the general basis for psychopathology, but the interaction of stressors, supports, and stress states determines specifically the type of disorder manifested by the individual.

Thus far, this paper has reviewed the development of, and reasons for, cross-cultural psychology, with a particular emphasis on modernization and its effects on the individual. In addition, the interactional model of stress and psychopathology has been discussed as the most useful paradigm for conceptualizing stressors, problem solving efforts, and psychopathology which may or may not be affected by modernization. The next topic of discussion concerns the culture of interest in the proposed investigation of modernization, stress, and psychopathology.

Research in the Arab World

If one looks carefully at the origins of cross-cultural studies in the fields of psychology and psychiatry, it becomes apparent that most of this work originates from Western developed countries. Furthermore, in a
small survey on the publication and dissemination of cross-cultural research, Lonner (1977) found that the most attention (from cross-cultural psychologists) is given to "the United States, India, Israel, Japan, Canada, Australia, and 10 widely scattered African countries" (in Lonner, 1979, p.30).

One area has been virtually ignored by Western cross-cultural psychologists and psychiatrists: the Arab states of North Africa, and to a lesser extent, the Middle East. A variety of reasons may account for the paucity of information on this region and its peoples. First and foremost is language. In most of the Maghreb (i.e. Morocco, Algeria, Tunisia, and Libya) and the Middle East, at least three languages are spoken and/or written. These include classical Arabic (the language of the Quran and much of the media), colloquial Arabic (the local dialect spoken in each country), and one European language (spoken and written by the formally educated Maghrebians among themselves and to Europeans, and by the media).

Another major problem for Western psychologists conducting research in North Africa and the Middle East is transportation, which may be unavailable or very expensive (particularly within the area). The absence of rental cars in many places, or their prohibitively high prices when they are available, often limit travel to those areas served by bus or train systems. And even if one were to restrict research to urban areas, the details involved in walking or taking a taxi to specific households along narrow, winding streets, with no visible street signs or house numbers, are at times overwhelming.
Finally, while it is doubtful that one would wish to restrict research to males only, the possibilities for speaking with women are often limited. With regard to any type of research on women living in conservative environments, female researchers are an absolute necessity. These problems are all formidable ones, but an obvious solution is to look for work being done by local psychiatrists. (Psychologists are still a rarity in the Arab world.) During the last two decades, the number of psychiatric studies conducted by local researchers has been steadily increasing.

In the review of the literature on Arab psychiatry and mental health which follows, Middle Eastern and North African countries are included. Recognition is given to the diversity of Arab culture, and to the potential errors made in generalizations about Arabs. (In fact, the more accurate term may be "Arab cultures" in the plural form, than "Arab culture".) However, as El-Islam (1982) has noted, Arabs of different nations do share certain "features of general relevance to psychiatry", including "traditional beliefs regarding spirits and the evil eye, family structure and relationships, the status of women, and healing or protective practices" (p.5).

The review begins with a discussion of Arab culture, in order to aid the reader in understanding mental health and illness in Arab society. Secondly, the current research on psychopathology is discussed for the Arab world in general, then for each country specifically. The nations for which English (and a few French) language studies and reviews were found include Egypt, Kuwait, Qatar, Iraq, Lebanon, Saudi Arabia, Libya, Algeria, and Tunisia. Following the discussion of research for each
country, a summary is provided. In the last section of the review, a few conclusions are drawn based on the similarities and differences found in this overview of Arab studies in psychiatry and psychology.

**Arab Culture**

In beginning a discussion of Arab culture, one must first define what is meant by "Arab". Often, no distinction is made between Arabs and Muslims, although the terms are not identical in meaning. A Muslim is any member of the Muslim faith, that is, a follower of Islam, and is not necessarily an Arab. Islam is the major religion of several non-Arab states, including Turkey, Iran, Indonesia, and Somalia.

The definition of an Arab is more difficult. One can find Arabs who are not Muslim (e.g. Christian Arabs in Lebanon), and Arabs who do not live in an Arab country (e.g. those living in France), and one can even find Arabic-speaking individuals raised in an Arab country who are not considered Arabs (e.g. Tunisian Jews). As W.B. Fisher notes, "From the point of view of the anthropologist, it is impossible to speak with accuracy either of an Arab or of a Semitic people. Both terms connote a mixed population varying widely in physical character and in racial origin, and are best used purely as cultural and linguistic terms, respectively." (cited in M.D. Wormser, 1981)

Thus, in sum, an Arab is one whose culture and primary language are Arabic. Because this definition applies to Arabs all over the world, a brief description of the geographical location of the majority of Arabs may be helpful.

The Arab world can be divided into two major areas. The first area is located in Southwest Asia, and includes the Fertile Crescent nations
of Jordan, Lebanon, Syria, and Iraq, and the Arabian Peninsula nations of Saudi Arabia, Yemen, Southern Yemen, and the Persian Gulf principalities. The second major area is North Africa, which includes Morocco, Algeria, Tunisia, Libya, and Egypt, (although Egypt is often considered separately). The total land mass of these two Arab regions is 4,658,063 square miles, and in 1980 the total population was 161,768,000 (The World Factbook, 1981, in Patai (1983), pp.11-12, & 357).

In his discussion of the focal concerns of Arab culture, (in contrast to the Western emphasis on technology, scientific inquiry, nationalism, and individual rights), Patai (1983) considers five dominant areas of concern. The first area is that of traditionalism.

Traditionalism is characterized by a respect and desire for the old over the new, and a resistance to change. This aspect of the Arab culture is particularly interesting in relation to the study of modernization and Westernization, as these latter processes are built on the assumption that the new is better than the old. Although Arab culture is tradition-oriented, it is presently experiencing the effects of modernization and Westernization. The degree of change due to these influences is of course very different, depending on the region, the type of modernization, and the particular cultures involved. In certain rural areas, modernization has had relatively little effect on people's daily lives, whereas in some cities (such as Beirut), many Arabs live a surprisingly modern lifestyle. This extreme variation in the degree of modernization found in many cases within one country, provides an excellent opportunity to learn how people adjust to change, particularly culture change, in their daily lives.
The second important concern, religion, is closely related to traditionalism. In his article on "Islam and Modernization in the Arab World", Sharabi (1966) discusses the declining influence of Islam on its members during the twentieth century. However, he describes three areas in which Islam, since World War II, has continued to affect the Arab psyche.

First, in the spontaneous, instinctive beliefs of common man; an unarticulated attachment to inherited attitudes and modes of behavior and a psychology beyond the reach of certain external ideas and influences.... Secondly, in the articulate urban Arab intellectual's intuitive self image... now compounded with an intellectual awareness sufficient to free the intellectual from the bonds of popular piety ....[And thirdly,]...there is a certain type of 'logic', a kind of mental attitude and approach which is exclusively Islamic. (pp.26-27)

As mentioned earlier, traditionalism and religion are closely linked in Arab society, often to the point that an individual may explain the observance of a particular tradition as dictated by the Quran, when in fact it is not. Recently, a return to fundamental beliefs and traditions has occurred in many Arab nations affected by Westernization and modernization. This movement is more pronounced within the Shiite
division of Islam, although its effects are also being felt in nations which are predominantly Sunni.

The third focus of concern is familialism. In Patai's words, the Arab family is "extended, patriarchal, patrilineal, patrilocal, endogamous, and occasionally, polygynous", and thus, must "reign central and supreme in both social and individual life" (p.282). Furthermore, the family consists of a male-dominated hierarchy, in which most men are committed to preserving their own status, and thus, the traditional family structure.

However, in an extensive study of family structure in the Arab Levant, Prothro and Diab (1974) found that "some family ties- as reflected in endogamy and in residence patterns- have grown weaker in the past two decades" (p.73). Prothro and Diab noted that this tendency is more apparent in the cities and among the upper classes. In addition, they emphasized the importance of the "ideal", (the traditional, patriarchal family), because although this ideal may not always be a reality, it does indicate the prevailing values held by many Arabs. Concomitantly, Sharabi and Ani (1977) have called the family a "microcosm" of society in its values and structures (p.244).

The fourth and fifth areas of emphasis in Arab culture are difficult to separate from familialism. They include the intense personal quality of most relationships in Arab society, and sexual mores, respectively (Patai). The former characteristic most probably originates from the traditional village lifestyle in which privacy is extremely undesirable, personal information is known by all, and strangers are rare. The latter
concern, sexuality, is interwoven with the issues of honor, modesty, tradition, and religion.

In traditional Arab society, the family's honor rests on the modesty of its female members. Violation of the modesty code (designed to eliminate temptation by women of men) brings shame upon the family. Consequently, as heads of the family, men assume responsibility for enforcing the code. It is interesting to note that one underlying assumption in this belief system is that women are unable to control their own intense sexual desires, and that men are even more vulnerable to being seduced by women, to the extent that men must conceal women in order to decrease their own temptations. In relation to modernization, one can easily see why conflicts arise when Eastern and Western concepts of sexuality collide.

In summary of Patai's description of Arab culture, five areas of concern are emphasized: traditionalism, religion, familialism, the intensity of social interaction, and sexual mores. These areas are not in the least exhaustive, nor are they discrete categories of beliefs and behaviors. Rather, a description of each area yields a general idea of the features shared by Arabs of many different nations.

**Arab Psychiatry**

In 1970, John Racy conducted an investigation of Arab psychiatry, the focus of which was the Arab East (Egypt, Iraq, Jordan, Kuwait, Lebanon, Saudi Arabia, Sudan, and Syria). Racy's study provided a thorough overview of the early status of psychiatry in the area, including research, training, and folk healing practices. He reported that research was being conducted at Cairo University (on physiology and
somatic therapies), at Ein Shams University (on hashish), at Khartoum's only psychiatric clinic (on incidence of and variations in mental disorders in rural communities, and on local healing practices), and at the American University of Beirut. The latter's departments of sociology and psychology were then conducting research on the effects of culture change on educated youths. And in the American University's Faculty of Medicine a psychiatric case register of Lebanon had been conducted and published in a series of reports by Katchadourian (which will be discussed more specifically in regard to research in Lebanon).

But Racy described this work as research activity "defined in the broadest manner", "confined to a few individuals at a few centers" (p.60). He wrote that "the poor academic status of psychiatry is one of the two major flaws afflicting mental health activity in the Arab East" (p.61), (the other major flaw being low pay).

More recently, Melikian (1984) reviewed the status of psychological knowledge in five Gulf states (Bahrain, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates), and found the major concern of the university research institutes to be with educational psychology. Melikian notes that "most of the currently published research lacks a theoretical framework" (p.71). He suggests that this problem is possibly due to the paucity of psychological research conducted in the area, a situation which "makes almost any topic attractive and important", and thus results in a variety of unrelated studies lacking continuity and depth (p.71).

However, since Racy's investigation in 1970, the number of published psychiatric studies has increased substantially. Although most of these studies are still conducted by a small group of researchers, their work
taken together provides a broad perspective of psychiatry in the Arab world. Concomitantly, culture, culture change, modernization, and Westernization are among the variables of greatest interest in the study of psychopathology among Arabs today. Such studies have been conducted in a variety of Arab nations, and are discussed in relation to Arab culture in general, then to the specific country (or culture) from which they originate. Most of these studies do not form an organized approach in terms of theoretical orientation, but rather, they are descriptive of psychiatric disorders, their prevalence, and related variables. Furthermore, these studies are published in a variety of languages, and consequently, for many, only English (and a few French) language reviews will be cited.

In a comprehensive overview of Arab cultural psychiatry, El-Islam (1982) lists several reasons why the prevalence of psychiatric disorders have been consistently underestimated in the past. These reasons include the false explanation of mental symptoms as "delusory cultural beliefs", "the somatic orientation of both patients and doctors", and "the tolerance of symptoms by patients and relatives" (p.12).

This problem is exacerbated in the case of women, who have been traditionally underrepresented in mental hospital data. Possible reasons for this latter situation are offered by El-Islam: (1) In younger women, psychiatric disorder could decrease their chances of being married, and thus they are protected by their families; (2) In older women, psychiatric problems may go unnoticed, or be considered unimportant, as their responsibilities are increasingly assumed by the younger women; (3) Women are less likely to be educated, and therefore may be less aware of
such problems and/or report them less; and (4) Males often work outside the home, with people who are less tolerant (than their own families) of illness.

Another reason for the underrepresentation of women in hospital data not mentioned by El-Islam concerns the lack of access to health services for Arab women. In some isolated rural areas (e.g. the Bedouin settlements of Tunisia) there are no health services within walking distance. Furthermore, in villages where there may be services, a woman's ability to obtain those services may depend on gaining her husband's approval and aid.

El-Islam also discusses the types of mental illness most common in Arab culture (in general), including somatic pain, tension or anxiety, sexual disorder, hysteria, neurosis, affective disorders, paranoia, delusions, and mental subnormality. The first, psychosomatic pain, is a common problem found throughout the Arab world. Because psychological problems are generally not recognized as legitimate illnesses, and because little or no connection is made between events or interpersonal conflict and physical illness, mental distress is often manifested physically.

Women, in particular, have fewer modes of expression for frustration, anger, and anxiety, and the somatic expression of these feelings is socially acceptable. El-Islam notes that physicians often contribute to this behavior by their own emphasis on physical health, to the exclusion of mental health. These somatic complaints are usually in the form of vague aches and pains, and in the case of anxiety, often felt in the bones. In addition, anxiety may be manifested in compulsive behavior
(e.g. hand washing), which is masked by socially accepted rituals of cleanliness.

The second psychological problem, sexual disorder, is frequently reported by men, and often accompanied by complaints of lower backache due to the belief that the lower back is the source of sperm. However, sexual problems are rarely reported by Arab women, probably due to reasons such as modesty and the traditional beliefs surrounding the issue of sexuality. As Racy (1970) noted in his discussion of Middle Eastern psychiatry, "The traditional cultural view of the matter- one frequently enunciated by women in out-patient obstetrical clinics- is that sexual pleasure is a man's perogative and successful intercourse his exclusive responsibility, with the woman complying as a passive partner." (p.72)

The third mental disorder mentioned by El-Islam is conversion hysteria, in which men and women may exhibit the symptoms of "aphonia [loss of voice] breathlessness, vomiting, pareses, jerking, fits, blindness, and speech disturbances" (p.14). This disorder is a socially condoned way to communicate and to gain care.

The fourth psychological problem is a type of neurosis, characterized by physical weakness and hypochondriasis. The only study of this problem cited by El-Islam is one conducted on Qatari women, which will be discussed more fully in relation to studies within that country.

Following neurosis are affective disorders. El-Islam states that in comparison to Western forms of depression, depression in Arabs is less often manifested in "undisguised affective symptoms" and guilt (p.14). Similarly, Racy (1970) commented that suicide, self-abasement, and guilt are rare in Middle Eastern depressives, possibly due to a belief system
which values "resignation to fate" over direct action, and emphasizes projection as a relief for guilt feelings (p.72). El-Islam (1984; reviewed by Al-Ansari) and Racy both note that somatization is common in depression. However, as Arabs become more Westernized, their affective disorders are resembling Western descriptions.

Another psychological problem involves paranoia and delusions. These symptoms, in particular, must be viewed with careful consideration of cultural norms and beliefs. El-Islam (1982) distinguishes between psychotic paranoid delusions and culturally held beliefs (e.g. concerning the "jinn" or evil spirits) by defining the psychotic form as "personification of the devil or jinn as persecutory figures", and the cultural form as a belief in "supernatural agents" which is congruent with cultural norms (p.15).

Finally, mental subnormality is considered a mental problem, although it does not exactly fit into the category of psychopathology. In brief, the mentally subnormal are often considered to have spiritual powers, such as clairvoyance, or the ability to "bless" others (Amin, 1948, in El-Islam), and have been integrated into the traditional social structure. However, with the increasing need for skilled labor in many areas, their deficiencies are becoming more apparent.

Two additional psychopathological problems not mentioned by El-Islam are also important. The first, alcohol addiction, is thought to be rare, particularly among women, which may be due to the Quranic prohibition of alcohol consumption. The second, criminal behavior, can usually be explained in terms of social mores (e.g., the murder of a woman who has "dishonored" her family by violation of sexual modesty norms, or the
murder of a man for revenge), although an increase in delinquency and crime may be occurring as a result of urbanization (Girgis, 1965, in Racy, 1970).

**Egypt**

The first Arab nation to be included in a discussion of local Arab studies is Egypt. Five relevant studies are described, in chronological order.

In 1969, El-Islam and El-Deeb conducted an investigation of educational and occupational correlates of psychiatric illness, in order to examine the premise that civilization and industrialization increase psychiatric disorder. Data from a group of 967 psychiatric outpatients and a control group of 200 medical cases at the Kasr-El-Aini Hospital in Cairo were analyzed in three educational categories: (1) illiterate, (2) primary or preparatory school-educated, and (3) secondary school or university-educated (no women were in this group); and three occupational categories: (1) unskilled (mostly agricultural) laborers, (2) skilled (mostly industrial) laborers, and (3) unemployed. Secondary- and university-educated individuals were excluded when occupation was considered, and unemployed women (the normal case for women) were categorized by the occupation of their supporting male (i.e. their husband or father).

The results showed that male and female psychiatric patients had significantly higher occupational status than control patients of the corresponding sex, and male psychiatric patients as a whole had significantly higher educational status than the schizophrenic subgroup. These findings indicate that civilization and industrialization (as
represented by education and occupation) may be associated with greater psychiatric disorder. However, these conclusions are questionable in relation to females, as women were not represented in one group (secondary- and university-educated), and were categorized by their husband's or father's occupation in another (unemployed).

In another study by El-Islam (1969), the prevalence of guilt and several other variables was investigated in 157 depressed outpatients. Prior research on non-Christian peoples led Murphy, Wittkower, and Chance (1964, in El-Islam, 1969) to conclude that guilt is rare in non-Christians. However, the results of El-Islam's study of Egyptian Christian Copts and Muslims showed no significant difference in guilt between the two groups. Concomitantly, the overall "Guilt group" had significantly higher educational status than the "No Guilt group". In women, parental loss before the age of 15 years was significantly more frequent in the Guilt group than in the No Guilt group, indicating a possible predisposition or vulnerability to guilt in later life. However, no significant difference in guilt was found between males and females. El-Islam notes that this may be so because guilt may not be associated with, or determined by, the cultural roles of males and females. Finally, projection of guilt onto others was found to occur less in the Guilt group than in the No Guilt group, indicating the use of projection as a way to reduce guilt.

In the third Egyptian study, the relationship between culture change and mental disorder was examined in a Cairo outpatient population (El-Sendiony, Abou-El-Azayem, & Luza, 1977). An association was found between rapid industrialization and "serious symptoms of depression", 
particularly among villagers who migrated to the city to work in factories. El-Sendiony et al. attribute the higher rates of depressive symptoms in migrants to the social disorganization which occurs during migration.

The fourth Egyptian work is a descriptive study of 2,745 psychiatric outpatients in Alexandria. El-Fatatry, El-Kashlan, El-Garem, and Ghazi (1980) found significantly more neurotics and fewer psychotics among women than men, and significantly more mental disorder for both men and women in the 15-30 age group. Women between the ages of 45 and 60 showed a predominance of anxiety, which El-Fatatry et al. attribute to menopausal disturbances. Schizophrenia was found to be more common in males than females in the 30 to 45 age group, but more common in females after age 45. This later predominance of schizophrenia in females may be explained by the protective attitudes of families towards their female members, and to a fear of not being able to obtain a marriage partner if mental illness is revealed.

In contrast to the study by El-Islam and El-Deeb (1969), "Consideration of the educational levels studied in the various groups of persons with psychiatric disorders did not indicate clear-cut educational correlates to any one group" (p.71). El-Fatatry and his colleagues conclude by expressing their disagreement with El-Islam and El-Deeb on the educational correlates of mental disorders. One possible reason why such discrepant results were obtained is that the studies were conducted in two different cities- Cairo, and Alexandria, respectively- and may contain effects due to different values, belief systems, and/or lifestyles of these two areas.
The last Egyptian study concerns anxiety in 120 outpatients. Okasha and Ashour (1981) developed an Arabic version of the Present State Examination, similar to the original with the exception of four additional questions on possession, traditional healing, sexual inadequacy, and praying. The survey was used to assess symptoms in patients diagnosed as suffering from an anxiety state. In a prior study, Okasha, Kamel, and Hassan (1968) found anxiety states present in 18% of a selective psychiatric outpatient clinic. In this study, Okasha and Ashour found the highest anxiety states in the 20-29 age group, for both sexes, which they explain in terms of stress due to marriage, "finding and maintaining suitable employment, frustrated expectations, housing difficulties, economic inflation, political sanctions in developing countries, and the dilemma between following local traditions and culture and adjusting to westernized life styles" (p.71).

In relation to significant social class differences, Okasha and Ashour found that illiterate patients suffered more often from "depersonalization, dissociative and conversion symptoms", whereas high school graduates more often showed "poor concentration, loss of weight, delayed sleep, anergia, retardation, obsessional checking, fugues and amnesia" (p.71-72). The authors state that these findings support clinical observations of the greater frequency of hysterical symptoms in uneducated individuals with average or below average intelligence. In addition, significant differences in anxiety symptoms were found between patients living in severe crowding conditions and mild crowding conditions. However, only one symptom, panic attack, was significantly different between patients living in mildly crowded versus uncrowded
conditions. Also, out of the group of 118 patients for whom the information was recorded, "58 were not living in crowded conditions, 34 [were living] in crowding and 26 in severe crowding", a finding which prompts Okasha and Ashour to state that it seems "as if crowding as a factor does not play a major role in the initiation or maintenance of anxiety" (p.71-72).

In summary, this Egyptian research presents conflicting evidence on the relationship of modernization to psychiatric disorder. El-Islam and El-Deeb (1969) found civilization and industrialization to be related to higher rates of psychiatric disorder, El-Sendiomy et al. (1977) found rapid industrialization to be related to depressive symptoms, and Okasha and Ashour (1981) found hysteria to be more common in illiterate patients. In contrast, El-Fatatry et al (1980) found no clear educational correlates to psychiatric disorder, and Okasha and Ashour (in the same study previously cited) found that crowding was not a major factor in the initiation or maintenance of anxiety. Finally, apart from the study of modernization effects, El-Islam (1969) found no significant difference in prevalence of guilt between depressed Egyptian Christian Copts and Muslims.

Kuwait

In another Arab country, Kuwait, two studies were recently conducted on psychiatric disorder and services (Kline, 1963; Parhad, 1965), one study on sexual disorders (Okasha & Demerdash, 1975), and one study on the relationship between life events and depression (El-Islam, Mohsen, Demerdash, & Malasi, 1983). Kline's study was primarily an overview of psychiatry in Kuwait, including patient statistics and information on
administration, facilities, and staff. Kline found that out of the 586 inpatients admitted from September 1959 through August 1960, 205 were diagnosed as schizophrenic, and 161 as suffering from manic depressive psychosis, with the remainder suffering a variety of other disorders. Of 1,718 outpatients admitted during this period, the greatest number (520) were diagnosed as having no psychiatric condition, followed by 368 with anxiety state and phobias, 194 with hysteria, 127 with psychosomatic condition, 120 with neurological disorder, and lesser numbers with other disorders. As in previously mentioned studies, Kuwaiti male patients outnumbered females 2 to 1.

Kline writes that as urbanization has increased in Kuwait, social outlets for emotional expression have decreased to the extent that women have no place to meet other women, except within their own families. In contrast to Egyptian women who, for economic reasons, must work outside the home, Kuwaiti women are generally wealthier, and do not. The female psychiatric patients in this study suffered most commonly from awar, characterized by pain in the bones, and also from sawakhis, with pain in the muscles, and headache.

Kline also comments on the high incidence of homosexuality in males, which was linked to paranoid ideation in Kuwaitis, but to an absence of paranoid ideation in Bedouins. He offers the opinion of the hospital director that "a modicum of civilization and education is needed for paranoid delusions to occur", and notes that this situation "raises questions about the conjectured relationship between paranoid reactions and homosexuality" (p.769). In addition, he estimates that approximately 10% of the Kuwaiti are "at least sporadically alcoholic" despite
religious constraints against its consumption (p.769). (Kline does not specify, but appears to be referring to males only here.)

In conclusion, Kline writes that "the general impression of the Egyptian psychiatrists who staff the hospital is that the overall incidence of mental disease is not appreciably different from that in Egypt or the Western world" (p.768). It may interest the reader to know that as recently as 1970, Racy reported Kuwait's Hospital for Nervous and Psychological Disorders to be "one of the newest (1958) and best staffed institutions in the area" (p.45).

Parhad (1965) confirmed many of Kline's observations, in his description of a (then) recently opened outpatient clinic in Kuwait. Parhad noted that patients' problems were difficult to classify. He found only a few psychoneuroses (acute anxiety, conversion, and depressive types), and no phobic, dissociative, or compulsive disorders. The more common disorders were psychophysiological, usually involving the musculo-skeletal system in women, and the gastro-intestinal system in men. Parhad states that over 80% of the general male population are overtly homosexual, and that the common complaint of "piles" by men (which was usually found to be nonexistent upon examination) reflects the "somatization of homosexual conflicts" (p.15).

In his discussion of social factors involved in Kuwaiti illnesses, Parhad notes that in women "any impulses towards self-assertion or aggression are expressed pathologically as psychosomatic symptoms", particularly as limb and general body aches. (p.16). In regard to social class differences in psychiatric disorders, Parhad found that of the 414 patients, the majority with psychosomatic symptoms (about 80% of the
total) were of the poorer working class. Of the 15% of the population with psychoneurotic symptoms, over 50% of the men were of the social class described as "self-made persons and intellectuals with a fairly secure economic status", but 85% of the women (with the same symptoms) were of the poorer working class.

Parhad explains these sex and class differences as an indication that social mobility has affected men more than women, i.e., that women have been more insulated than men from the effects of modernization, and thus continue to repress their aggressive impulses in accordance with social constraints. Finally, Parhad notes the interesting fact that the majority of patients had had one parent die (and more often the father) during their childhood.

A third study by Okasha and Demerdash (1975) investigated sexual disorders in 32 Kuwaiti, 17 Palestinian, and 19 Egyptian males. Of the 34 patients with early-onset disorders, "17 patients suffered from impotence (erectile disorders) and 17 from premature ejaculation;" and of the 34 patients with late-onset, "30 suffered from impotence, 3 from premature ejaculation and one from retarded ejaculation" (p.446). Forty-five percent of the 68 patients reported a past history of homosexuality, which most explained as due to the unavailability of women or "seduction and/or imitation" (p.447).

The most frequent somatic complaints were backache, orchialgia, and head and body aches. Okasha and Demerdash suggest three reasons for the frequent reporting of backache as a symptom: (1) that it may be a conversion symptom resulting from the debasing disorder; (2) it may be due to chronic tension and muscle spasms; and/or (3) it "may be accounted
for by the belief that the back is the source of sperm and manhood" (p.447). The authors conclude by noting that the majority of Egyptians agreed to consult a psychiatrist, whereas the Kuwaitis and Palestinians did not, probably because the former were seen in the psychiatric department of a general hospital, and the latter in a mental hospital (which involves greater social stigma).

The fourth study in Kuwait was conducted by El-Islam and his colleagues (1983) on the relationship between life events and depression. The study included a total of 399 depressed outpatients in Kuwait and Qatar (164 and 235 patients, respectively). Both of these countries consist of a large number of foreign workers, who are permitted to live in Kuwait and Qatar only as long as they are employed there. For analysis of the data, recent life events were categorized as work or family related, or general. The sample was divided into two groups: natives of Kuwait and Qatar, and transient workers. Both males and females were included. As expected, the transient workers had experienced more work related life events than natives, possibly because their residence in Kuwait and Qatar depended entirely on their employment.

Another variable of interest was intergenerational conflict (IGC), a common problem in Arab extended families, particularly in those countries experiencing rapid culture change or modernization. IGC was found significantly more often in the native sample than in the transient sample. El-Islam et al. attribute the lower incidence of IGC in transient workers to the greater number of nuclear families in this group, and to their emphasis on wealth rather than tradition.
Concomitantly, the native group's higher IGC may be due to the sociocultural changes occurring in Kuwait and Qatar (e.g. rapid economic growth due to oil revenues, and an influx of foreigners). These types of changes have had profound effects on the traditional value system, in some cases taking away coping mechanisms and supports, and leaving nothing in their place. In fact, in Qatar, native female patients reported more IGC than male patients prior to depression, which El-Islam et al. suggest "may relate to the disadvantaged state of women in traditional culture and hence the greater gap between what is traditional and what is aspired" (p.18).

In brief, three of these Kuwaiti studies discuss the effects of modernization on psychiatric disturbance. Kline (1963) discusses the reduction in social outlets for Kuwaiti women which has resulted from urbanization, but concludes with the impression (of the Egyptian psychiatrists) that the incidence of disorder seen in the Kuwaiti hospital is not significantly different from that found in the Western world. In contrast, Parhad (1965) explains sex and class differences in disorders seen at an outpatient clinic as an indication that social mobility has affected Kuwaiti men more than women. Furthermore, El-Islam et al. (1983) attribute intergenerational conflict in Kuwaiti families to rapid social change. And finally, Okasha and Demerdash (1975) provide a general description of sexual disorders in Kuwaiti males.

Qatar

Two studies closely related to the one above were conducted in Qatar. In the earlier study, El-Islam (1975) investigated a culture-bound neurosis in Qatari women by comparing two groups of female
neurotic patients: (1) neurotics who experienced a constellation of symptoms consisting of giddiness, palpitations, breathlessness, tightness in the chest, nausea, and fatigue due to somatic pain, especially in the arms and legs; and (2) neurotics who did not experience these symptoms.

El-Islam found differences in several sociocultural variables between the two groups, which resulted in his classification of the first group's syndrome as a culture-bound neurosis (CBN). The CBN patients were significantly older, less likely to be literate, and had lengthier durations of the illness. The older age of CBN patients may be related to chronicity, as the mean age of onset of illness for both groups is close to the difference between the mean age of onset and the respective mean duration of the illness. El-Islam notes that the lower frequency of literacy in CBN patients may be indicative of these patients' inabilities to verbalize their feelings of frustration and anger, thus leading to the manifestation of psychological distress in somatic pain.

Stressful sociocultural factors consisted of four categories: (1) divorce or death of the husband without remarriage, or never having married; (2) threatened loss of the husband, for example, due to threatened divorce or polygyny (up to four wives were legal in Qatar as of 1975); (3) childlessness, due to sterility or death; and (4) other environmental factors, including excessive social restriction by the husband, having no male children, or misfortune. Because no women in the non-CBN group were childless, the third category was omitted in the analysis.

A significantly greater number of patients in the first and second categories were found in the CBN group than in the control group. That
is, more of the women who were husbandless, or threatened by the possibility, experienced the particular set of symptoms labeled culture-bound. Furthermore, 13 out of the 60 CBN patients were childless, whereas none of the control patients were childless. As El-Islam explains, the fulfillment of the female role in Qatari society is accomplished almost solely through marriage and childbirth. The woman who fails to satisfy these requirements may become physically ill, a defense which provides an explanation for her failure, and concomitantly, evokes sympathy, rather than disapproval and shame. Thus, the woman views her illness as the cause of her social problems, rather than the result.

In conclusion, El-Islam uses Wittkower's (1968) classification scheme to define three types of "value oriented cultural stresses" which may be causal in culture-bound neurosis: (a) "existing value orientations related to methods of marriage, criteria of success in feminine role performance and the extended family life"; (b) "coexisting value orientations" observed in foreign inhabitants and in the media; and (c) "changing value orientations", as in the changing attitudes towards the education of women (in El-Islam, p.28). This third type of stress is particularly evident in the case of the unmarried woman who is too old to have been educated. Because she has not fulfilled the success requirements of the traditional role (i.e. marriage and childbirth), nor of the modern role (through education), she is caught within the changing value system, with few emotional outlets. Consequently, her psychological conflict may be manifested in culture-bound neurosis.
In a subsequent study of intergenerational conflict in young Qatari neurotic outpatients, El-Islam (1976) compared 216 neurotic patients involved in IGC, and 848 other neurotics. He found the IGC group to be significantly more often male, young, and better educated than their fathers. Also, the IGC patients had significantly greater age gaps between their own ages and their fathers' ages. In contrast to the syndrome called culture-bound neurosis, which was found in Qatari women, no particular symptom or group of symptoms were found in the IGC group. Although neurotic patients experiencing IGC were not significantly different in their illness from other neurotic patients, IGC is a serious problem. A greater understanding of IGC could ease the cultural changes occurring from modernization, for the individual, and for the community.

More recently, El-Islam (1979; 1982) has also investigated the extent to which the extended family facilitates the schizophrenic family member's rehabilitation. The first study (1979) involved 272 male Qatari patients diagnosed as schizophrenic or as having schizophreniform attacks, and belonging to either an extended family or a nuclear family. In comparison to patients from nuclear families, patients from extended families presented earlier for treatment, included more cases with "less than a month's history of symptoms", had their illnesses more often preceded by intergenerational conflict, and were less likely to "present with affective withdrawal" or to "deteriorate into withdrawn blunted states" (p. 344). The latter effect held true even when cases of illness of one month or more were excluded, and all of these trends were also found in comparisons of extended and nuclear families within the same tribe.
In the subsequent study of 540 male and female Arab schizophrenics, El-Islam (1982) found similar results: the extended families were more tolerant of abnormal behavior, "more helpful in the supervision of patients' medication and their social adjustment and leisure-time occupation" and more often helped patients to explain and understand their illness in terms of cultural beliefs (p.112).

An interesting feature of nuclear families in Qatar is their often large size which tends to negate the hypothesis that the effects of extended families on their patient members are simply due to a larger family size. El-Islam concludes that in comparison to the nuclear family, the extended family shows "superior social rehabilitation potential" for the patient, although this help may be a mixed "blessing", particularly with regard to women, intergenerational conflict, and forced marriage of mentally ill patients.

Finally, El-Islam (1980) studied the delusions of psychotic Qatari patients, and found that females, patients from extended families, nonschizophrenics, and patients with "supernaturally centred delusions" were more likely to experience the disappearance of their delusions into cultural delusory beliefs, rather than the persistence of those beliefs or their metamorphosis into dreams or fantasies which the patient recognizes as imaginative. In regard to social class variables, the educated and those who had lived abroad were more likely to express themselves verbally and thus report their delusions directly, whereas illiterate patients were more likely to express their delusions through abnormal behavior.
In conclusion, all of these studies by El-Islam point to the impact of modernization and Western values on Qatari life and psychopathology. In particular, intergenerational conflict appears to be an important factor in the initiation and exacerbation of psychiatric problems (1976). Furthermore, culture-bound neurosis in women is linked to certain "value-oriented cultural stresses" including those due to exposure to new and changing ideas about educating women (1975). The verbal expression of psychotic delusions are related to higher education and social class, whereas their behavioral expression is seen more in illiterate patients (1980). And finally, rehabilitation of schizophrenics is more effective in extended families (the traditional norm) than in nuclear families (1979; 1982).

Iraq

In an overview of psychiatric disorder and services in Iraq, Bazzou and Al-Issa (1966) describe types and prevalence of mental disorders at the Shamma'eeyah Hospital in Baghdad. Here, too, women were a minority of patients (500 of 2000 patients). The majority of patients, male and female, were diagnosed as schizophrenic, which the psychiatrists note is similar to the Western manifestation in symptoms and age distribution. They also state that depression is increasing in frequency, but is distinguishable from depression in the West by several features.

One, very few depressed Iraqi patients experience guilt or self-reproach, and suicide is extremely rare. Two, patients do not feel responsible for their illness, and tend to consider their illness a punishment from God. And three, paranoid ideas are common in depressives, expressed through verbal and physical aggression. This
aggression is also more common in Iraqi psychotic patients than in their Western counterparts. Furthermore, Bazzoui and Al-Issa observe that neurotic illness seems to be increasing, that hysterical illness still occurs in uneducated rural people, and that tics are occurring in response to "pressure discomfort" in people adapting to Western styles of dress. However, no statistical figures are given to substantiate these observations.

Finally, the psychiatrists mention that Iraqi society is relatively tolerant of mental disorder, allowing the disturbed individual to continue to live with his or her family until the problem becomes exceptionally difficult. Furthermore, the extended family structure provides protection and care for these individuals. If a wife is mentally ill, the husband may take another wife to perform her duties and to care for her. Or, if the husband is ill, the wife will care for him, and be supported by the family. The result of this system is that hospitalization, including outpatient care, is considered a last resort.

A more recent study by Bazzoui (1970) provides statistics on the distribution of depression and depressive symptoms in 98 male and female Iraqi patients. Of the 58 depressed patients, only 34% showed depressed mood, and of the 40 manic patients, 37.5% showed elated mood and 32% mixed moods. Similarly, only 13.7% of the depressives experienced guilt or self-blame, but 65.5% complained of physical symptoms. Paranoid ideation and physical aggression were common in manic patients, with 77.5% and 42.5% exhibiting these problems, respectively. In addition, Bazzoui found a "definite peak of incidence" in hypomania in the 20-29 age group, but "a more gradual rise" in the incidence of depression which
reached its peak in the 40-49 age group (p.198). Bazzoui concludes that the affective components of depression and mania do "not seem to follow the classical western descriptions of this illness", and that "depression is conspicuously coloured by physical symptomatology and hysterical behaviour", and mania by "aggression and anti-social behaviour" (p.203).

Finally, Al-Issa and Al-Issa (1970) discuss the traditional as well as the modern approaches to mental illness, and write that "the advent of Westernization in the [developing] countries has brought about many psychological problems relevant to conflicts between the old and the new systems" (p.22). Unfortunately, these problems are not afforded the needed attention of psychiatric services due to more pressing social problems including malnutrition and physical illness.

In summary, these three researchers, Bazzoui, I. Al-Issa, and B. Al-Issa, discuss the similarity of schizophrenic symptomatology in Iraqi patients to Western manifestations, the differences in manic depressive symptomatology, and the need for greater attention by psychiatric services to the psychological problems resulting from cultural changes.

Lebanon

Another Arab country which has been studied by psychiatrists (and psychologists) is Lebanon. Lebanon is the most Westernized Arab state, composed of a diverse population of which only approximately 50% is Muslim (Prothro & Diab, 1974, p.11). During the last two decades, Katchadourian and Churchill have written several reports on an epidemiological investigation of psychiatric disorders, based on data from all three of the existing hospitals and 20 of the 21 psychiatrists in Lebanon.
The first of these reports (Katchadourian, 1968) concerned the incidence and prevalence of disorders. Although no figures for the various types of psychiatric disorders were given, Katchadourian did calculate the period prevalence and point prevalence rates, and the incidence of mental disorder for the 4,636 Lebanese inpatients and outpatients. He found the period prevalence rate (between February and August, 1954) to be 237.5 per 100,000, and among the urban population, 365.3 per 100,000. Women tended to seek outpatient care more often than inpatient care, whereas men were more often hospitalized than treated as outpatients. Katchadourian's explanations for the more frequent hospitalization of males are similar to those given by El-Islam (1982).

Subsequent reports have addressed the relationship of mental illness to social class, religion, and education. In the two studies on social class and mental illness in the urban Lebanese, a definite class difference was found (Katchadourian & Churchill, 1969; 1973). In regard to point prevalence (all cases under care at the study's onset), incidence (represented by new patients with no prior psychiatric contacts) and readmissions, the following results were obtained. "On a given day (February 15, 1964) one finds over four times as many lower class psychotics under care (107 per 100,000) as upper class psychotics (26 per 100,000) and the ratio between the lower and middle classes is even more striking (about 6 to 1)." "Over a six month period almost twice as many lower class psychotics" as those of other classes are newly admitted, and "over twice as many lower class psychotics" as upper and middle class psychotics are readmitted (p.150). In contrast, the point prevalence for upper class neurotics (62 per 100,000) was almost twice
the lower class point prevalence (32 per 100,000), although middle class neurotics actually showed the lowest point prevalence (22 per 100,000), incidence, and readmission rates of the three classes.

In regard to religion, in a comparative study of Christians and Muslims, Katchadourian (1974) found that "Christians significantly outnumber [Muslims] in the overall patient population as well as in the incidence, point prevalence, and readmission subgroups." Within religious groups, Christian males and females have similar rates, whereas Muslim males "greatly outnumber [Muslim] females in all three component groups" (p.61). Furthermore, the authors note that "while religion does not seem to affect the diagnostic distribution of patients", in the cases of schizophrenia and affective disorders "the sex of the patient does matter", with Christian and Muslim males being more often diagnosed as schizophrenic and less often as affectively disordered than Christian and Muslim females, respectively.

In regard to education, Katchadourian and Churchill (1973) found a significant inverse relationship between educational level and the prevalence of illness for both males and females. In spite of the fact that the less educated were more likely to be poorer, less Westernized, and supposedly less inclined to seek Western psychiatric services, they were the largest group in this study. Thus, the researchers caution against drawing any firm conclusions from these results, which they say may be accounted for by a variety of social factors, (including, for example, the high rate of referral of less educated sociopaths by the courts and the less frequent court contact of better educated
sociopaths), and by the difficulties in separating out important variables such as social class, education, and income.

In addition to this study, Prothro and Diab (1974) studied family patterns in the Arab Levant (Lebanon, Syria, and Jordan), and although their book does not address psychiatric issues, it does provide two psychologists' views of the area, and its culture and people. In brief, Prothro and Diab found that modernization (without large-scale industrialization) is changing traditional family patterns and the role of women, and that these changes are beginning with the middle and upper classes. These findings are important in the understanding of psychopathology in relation to sociocultural change.

In conclusion, the series of studies on incidence and prevalence of psychiatric disorders by Katchadourian and Churchill found: (1) more lower than upper class psychotics, and (2) more upper than lower class neurotics (Katchadourian & Churchill, 1969; 1973); (3) more Christian than Muslim patients (Katchadourian, 1974); and (4) an inverse relationship between illness prevalence (i.e. in hospitals and clinics) and educational level (Katchadourian & Churchill, 1973). Concomitantly, Prothro and Diab (1974) found traditional family patterns to be changing with the influence of modernization, beginning with the upper and middle classes. However, Katchadourian and Churchill caution against drawing any firm conclusions from their results because of the difficulties involved in distinguishing the effects of social class, education, and income.
Saudi Arabia

The first of four publications on psychiatric disorder in Saudi Arabia to be discussed is one by Abd-El-Rahmed (unpublished manuscript reviewed in Transcultural Psychiatric Research Review, 1978), concerning acute mania diagnosed in 40 Saudi patients. Females outnumbered males 3 to 1, and the "peak occurrence" was in the 30 to 40 age group. Symptoms included "severe excitement with aggression, volubility up to incoherence of speech, and delusions of persecution and grandeur", and frequently, "dissociative symptoms such as fainting and fugue states".

However, in contrast to Western manic patients, Arab patients in this study were not hypomanic prior to the onset of illness, nor did they experience pathological elation or flight of ideas during the illness. Abd-El-Rahmed attributes the absence of these symptoms to the social restriction of females, which discourages laughing and joking, and may increase aggression. The reviewer of this article notes that Abd-El-Rahmed's criteria for distinguishing hysterical dissociative reaction from acute mania are not clear, and that the absence of pathological elation could have been due to the advanced state of the disorder.

The second study conducted in Saudi Arabia, by John Racy (1980), addresses somatization in 40 Saudi women. Saudi Arabia is noted for its conservativism, which includes severe social restriction of women. Saudi women are expected to marry and bear children, and few, if any, alternatives exist for most women. Polygamy is legal (or more specifically, polygyny), and men commonly retain the children following divorce. The Saudi woman learns from birth that she lives in a man's
world, and must submit her own wishes and feelings to those of men. One of the few socially accepted ways to obtain sympathy and help is through physical illness. Consequently, many women translate their psychological distress into somatic pain. As Racy explains, patients complained of aches and pains in the heart, head, shoulders, and back, of fatigue, and of "nerves". Some also had nightmares, and erratic appetite, although weight loss was not common. Typically, these women initially denied any interpersonal or family conflict. Racy concludes that "somatization can be regarded as a coded message wherein the code must be broken", in order to "achieve understanding or to effect significant change" (p.215).

A book has also been written recently by El-Sendiony (1981) on the effects of the Islamic Sharia (codes or laws) on Saudi behavioral disturbances (reviewed by El-Islam, 1983). Saudi Arabia is considered the religious center of the Muslim world, and as such, is the most conservative Arab country in its observance of Islamic law. El-Sendiony discusses the Sharia in relation to family life, women, crime, depression, antisocial personality disorder, and alcoholism. He writes that the Sharia allows for the protection of women, and in reality prohibits polygyny (because the practice is restricted to those who can treat all wives equally, which is an impossibility).

Furthermore, El-Sendiony believes that the low crime rate is due to the observance of Sharia, and that certain disorders are attributable to related beliefs and values. For example, the rarity of antisocial personality disorder "is attributed to group cohesion, advocated by Sharia, which breeds conformity, and to the absence of culture-education gaps such as those observed in countries with secular education systems"
Similarly, the low incidence of alcoholism is attributed to its prohibition, although as El-Islam notes, one must also consider social factors such as the disapproval and subsequent underreporting of alcohol consumption. In regard to social change, El-Sendiony concludes with the observation that the continued adoption of Sharia will temper the bad results of harsh and uncontrolled competitiveness in spite of the radical changes involved in rapid industrialization and urbanization in Saudi Arabia, and prevent the mental illness which often occurs with such changes (in El-Islam, p.66).

Recently, Dubovsky (1983) wrote an article on the state of psychiatry in Saudi Arabia. In regard to psychiatric problems, Dubovsky notes that disturbance appears to be increasing in women, possibly due to conflicts between traditional and modern role ideals. He confirms others' observations of the high frequency of somatic symptoms in the psychiatrically disturbed, and notes that the common belief in "in'shallah" (if God wills it) as an explanation for problems results in difficulties in treating patients. In addition, women's passivity, and the high degree of family cohesion makes inclusion of the family essential for effective therapy. Dubovsky also reports that suicide, alcoholism, and wife and child abuse are rarely reported as such due to religious prohibitions against suicide and alcoholism, and the social acceptance of wife and child abuse. In conclusion, Dubovsky writes that "the maintenance of religious and cultural traditions" provides a stabilizing function in this area of rapid cultural change.

The above studies by El-Sendiony (1981) and Dubovsky (1983) discuss the impact of modernization on Saudi culture and mental health, and the
accompanying temperance of this impact by religion and tradition. Racy (1980) and Abd-El-Rahmed (no date) emphasize the occurrence of somatization in psychologically ill Saudi women, and the absence of pathological elation in manic men and women, respectively.

The Maghreb

The last Arab region to be discussed is the Maghreb (i.e. the North African nations of Morocco, Algeria, Tunisia, and Libya). Despite a body of research published in French in Tunisia, so little psychiatric research has been published in English in these countries, that for this discussion they will be grouped together. No information on psychiatric disorders in Morocco was available for this paper, however, studies were found for Libya, Algeria, and Tunisia.

In Libya, three Egyptian psychiatrists, Kamel, Bishry, and Okasha (1973) published a preliminary report of their observations of psychiatry during the early 1970's. As reviewed by Racy (1975), their observations were of one Libyan hospital, and not necessarily representative of the country. Of 3500 psychiatric outpatients and 1072 admissions to the hospital, the largest group of disorders were neurotic, followed by functional psychoses, and "many" epileptics. The authors also discussed stress in Libyan lifestyles, including marriage, polygamy, increased family size, and a widely dispersed population, as influential in psychopathology.

Also in Libya, Khalid (1977) investigated symptoms in 303 male and female schizophrenic patients. Although this article was published in German, Lehmann (1979) provides a summary and critique (in English) of Khalid's study. Khalid found only 15% of the Libyan patients to have all
of Schneider's first rank symptoms. Concomitantly, he rank-ordered the
nine most frequent symptoms, compared them to a similar list of symptoms
for British schizophrenics, and found the first two symptoms to be
identical on the two lists—thought disorder and affective disturbance.
However, the third symptom on the Libyan list, paranoid delusions, was
sixth on the British list, which El-Sendiony attributes to the effects of
social change. But Lehmann concludes that for these Libyan patients, the
frequency of schizophrenic symptoms "does not differ significantly from
the frequencies one would expect in a Western schizophrenic population
today" (Lehmann, p.76).

In a comparative study of 45 Algerian and 125 French women, Brunetti,
Vincent, Neves, and Bennami (1982) found that the Algerian women were
significantly more depressed than the French women, as measured by
"impairment in daily life". However, when the total sample was divided
into subgroups, results showed that the women who worked outside the
home, and who liked their activity, were the least likely to experience
depressive symptoms.

Finally, in Tunisia, a group of researchers has been consistently
publishing studies (in French) on psychiatric disorders and the effects
of modernization. In 1962, Ammar studied the relationship of pregnancy
and childbirth to psychiatric disturbances in 67 psychotic Tunisian
women. Following the hypothesis that multiple births endanger the mental
as well as physical health of the mother, Ammar found that over "50 per
cent of the patients had a relapse within one year because of another
pregnancy; the others had relapses within two or three years after the

In 1972, Ammar and Ledjri published a book entitled Family Aspects of the Development of Schizophrenia (English translation), in which they described the world literature on schizophrenia, the family, and culture, followed by their own studies at er-Razi Hospital in Manouba, Tunisia (reviewed by Sterlin, 1973). The authors found that the schizophrenic family (in Tunisia) is characterized by extreme isolation or high social mobility. Furthermore, they discussed "the pathogenic influence of the process of 'family denuclearization' correlative to urbanization" (Sterlin, p.148). The reviewer of this book comments on methodological problems of this study (e.g. sample selection), but notes that for the subject, it is, "to [his] knowledge, the most exhaustive [review] presently available in the French language" (p.147).

In 1975, Ledjri and Annabi published an article on mental disorders in 42 Tunisian emigrants (in Transcultural Psychiatric Research Review, 1977). Only three of the patients had had histories of psychiatric disorder prior to their emigration. All of the patients emigrated to developed countries in Europe, or to the U.S., without sufficient education, training, or information about their host country. They were all expelled or repatriated to Tunisia, and diagnosed according to their symptoms as follows. The acute group consisted of 11 patients suffering from depressive anxiety reaction, 3 patients from confusional states, and 18 patients from paranoid episodes. The chronic group consisted of 5 patients, 3 of which had schizophrenic reactions. Five patients were diagnosed as alcoholic. With the exception of the 3 patients with prior
histories of disorder, none of the patients experienced a relapse during the three years following discharge from the hospital.

Also in 1975, Loussaief reported on hysteria in Tunisian males, which he found to be twice as common as in French males (Transcultural Psychiatric Research Review, 1977). In addition, Loussaief found differences between Tunisian military and civilian males, with the former (mostly of rural backgrounds and less educated) showing better prognoses than the latter.

The last three Tunisian studies to be discussed also concern the effects of modernization on mental health, and are all reviewed by Muller (1983). Ammar (1979) found that rates of psychiatric disorder have increased since Tunisia gained its independence in 1956 and launched several modernization plans, including compulsory education and reforms for women. (Ammar also published an earlier, similar study in 1964, which is reviewed in Transcultural Psychiatric Research Review, 1965.) Schizophrenia has doubled in the last ten years, and depressive states, deviant attitudes, suicide, and transplantation syndromes (the latter among Tunisians working in other countries) have increased. Although certain types of neurosis are uncommon, hysterical neurosis still occurs, particularly in women.

In the next study, Ammar, Attia, Douki, Tabone, and Hamouda (1980) investigated "mystical delirium" in 15 patients. This syndrome developed concurrently with other symptoms, such as anxiety or behavioral disorders, but eventually became the only syndrome. All of the patients were from modest religious families, had migrated to a foreign
environment, and lacked a "normal parental image" (Muller, p.273). Ammar et al. suggest that mystical delirium, characterized by the belief in oneself as divine, may occur in response to the need for parental identification.

The last and most recent study, by Ammar et al. (1981), concerns the effects of modernization on the manifestation of depressive disorder. The authors report a greater number of reactive depressions, followed by atypical and manic-depressions, which they attribute to the influence of modernization. In concurrence with other Arab studies, somatization was found to occur frequently.

In summary of the research conducted in the Maghreb, conflicting results appear. Whereas Khalid (1977) found differences in the frequency of schizophrenic symptoms (from Western descriptions), Lehman (1979) concludes that these differences are not significant. Brunetti et al. (1982) found Algerian women to be more depressed than French women, although when both groups were considered together, working outside the home and liking one's activity appeared to be more related to a lower frequency of depressive symptoms. In Tunisia, Ammar (1962) found a relationship between psychiatric disturbance in women and multiple childbirths (the norm in traditional society), and Ammar and Ledjri (1972) found extreme isolation and high social mobility to be characteristic of schizophrenic families. Ledjri and Annabi (1975) found hysteria to be more common in Tunisian males than in French males, and Ammar (1979) and Ammar et al. (1981) report an increase in rates of psychiatric disorders since independence and the commencement of modernization programs. Taken together, these studies indicate that
modernization may increase rates of certain types of psychiatric disorder, or for certain groups, but the results are far from conclusive.

Summary of Arab Psychiatry Research

The summary of studies discussed herein provides a broad overview of the psychiatric research currently being conducted in the Arab world. Many commonalities are apparent, including the underrepresentation of women, the manifestation of psychological conflict in somatic pain, and the preference for home care over hospitalization of mentally ill patients. But at least two issues are raised by the differences in results.

Although most agree that sociocultural change is affecting the prevalence and manifestation of psychiatric illness, researchers differ in what they hypothesize those effects to be. Whereas researchers such as El-Islam and Ammar have hypothesized and found evidence of a positive relationship between modernization variables and psychiatric disorder, others, such as El-Fatatry and colleagues (1980) dispute some of these findings. Furthermore, as Katchadourian and Churchill (1973) note, the problems involved in sorting out the effects of referral patterns, social class, education, income, and many other social variables make firm conclusions difficult.

A second issue which becomes apparent from this review, and from the cross-cultural literature in general, concerns manifestations of mental illness. Researchers have found the expression or symptomatology of mental illness in Arab patients to differ from that found in Western patients, although the extent and type of differences vary. For example, from the same data, Khalid (1977) found and emphasized differences in the
frequency of schizophrenic symptoms between Libyan and Western descriptions, and Lehman (1979), in his review of the study, concluded that these differences were not significant.

In conclusion, significant progress in the field has been made during the last twenty-five years. As Dubovsky (1983) writes in his review on the state of psychiatry in Saudi Arabia today, "It is impossible not to be impressed with what has been accomplished" in this society, "whose way of life [did not change] substantially from the eighth to the latter half of the twentieth century", but which "has experienced hundreds of years of modernization in just a few decades" (p.1458-1459).

However, much work remains to be done. Future research must begin to explain discrepant research findings, and continue to address the specific effects of culture and culture change on mental health and illness. As almost all of the work conducted in this field is limited to hospitalized patients, and in a few cases, outpatient populations, the investigation of psychological disturbance in normal groups, or in groups that do not have access to hospitals (or do not make use of that access), is essential for clarifying the effects of modernization versus the availability and/or increased acceptance of medical clinics.

In addition, although women have been included in several of the studies on epidemiology and prevalence of mental illness, only a few studies address in sufficient detail the social condition of Arab women as the context for modernization and its concomitant effects on them. Finally, as Melikian (1984) suggests in his recommendations for the development of psychology in the Gulf States (which apply equally to psychiatry), "An effort should be made to link any transmitted
psychology or any developed psychological knowledge to the culture and history of the area." (p.76) All of these considerations (i.e. the investigation of a normal population, of a population without direct access to medical care, and of women, and the explanation of the results in the context of the culture studied) are incorporated into, and accounted for in the present study. But before this project is described, the following section provides a brief overview of Tunisian society and the position of women in Tunisia today.

Tunisia

Tunisia is the smallest country in the North African Maghreb, consisting of 163,610 square kilometers located between the relatively massive countries of Algeria (in the west) and Libya (in the south), (Harris, 1982-83, p.773). Tunisia's northern and eastern regions are bordered by the Mediterranean Sea. In 1980, the population was estimated to be 6,408,200. Tunis is the largest city (population 1,179,000), and the state capital. Other important cities include the ports of Sfax and Sousse on the east coast (pop. 573,800 and 306,900, respectively), Bizerta on the north coast (pop. 389,500), and the old Arab capital and inland center of Kairouan (pop. 405,100), (Institut National de la Statistique, 1983, vol.28, p.18).

Geographically, Tunisia can be divided into roughly four major areas. The Tell, or northern region, is wet and mountainous, dominated by the eastern edge of the Atlas mountains. The Tell is also the most populous area, and includes the cities of Tunis and Bizerta. The central region, or Steppes, consists of semi-arid plateaux surrounded by barren mountains. The Steppes gradually slope down to the warm, humid plains of
the east coast, called the Sahel. And finally, the South is dominated by the Sahara desert, and is the least populated area.

Politically, Tunisia has experienced the occupation of numerous foreign invaders: Phoenicians (800 B.C.), Romans (146-439 A.D.), Arabs (647 A.D.), Turks (1574), and French (1881). Tunisia officially became a French protectorate in 1883, and obtained independence in 1956. Today, Tunisia is a free and sovereign republic, governed by the head of state (President Habib Bourguiba), the National Assembly (elected every five years), the Council of State (composed of two judicial bodies), and the Economic and Social Council (which studies projects submitted by the National Assembly). President Bourguiba began his office in 1957, and was elected "President-for-Life" in 1975.

Economically, Tunisia is considered a developing country. In 1979, the per capita income was US$850 (Harris, p.783). The major export is petroleum, although Tunisian petroleum comprises only .3% of the total OPEC production. The major employer is agriculture (including hunting, forestry, and fishing). Major crops include wheat (in the north), citrus fruit (in the northeast), olives (in the Sahel), and dates (in the southern oases). Tunisia has a relatively modern transportation system, including five international airports, several major Mediterranean ports, and a railway and road system. More than half of all of the nation's industry is located in Tunis, and includes the processing of raw materials, textiles and clothing, and various other products.

Tourism was the largest foreign currency earner between 1968 and 1976 (petroleum is the largest now), and in 1979 approximately 1,356,000 tourists, mainly from Algeria, France, West Germany, and Britain, visited
Tunisia. The point should be made though, that tourists typically stay in only a few cities and resorts, and (with the exception of commerce) are not integrated into Tunisian village and rural society. Generally speaking, tourists are rarely, if ever, seen in Tunisian villages and rural areas, and although boys and men may visit resorts near their villages, many village and rural women have never seen such places.

Education is a priority in Tunisia, and approximately 80% of all school age children attend school. In 1979/80, 1,024,537 children attended primary schools, 241,908 attended secondary schools, and 25,602 attended the University of Tunis (Harris, p.805). Arabic is taught and spoken in the first three years of school, but is replaced by French in the higher grades. Primary school lasts six years, followed by seven years of secondary school. Students must pass examinations at the end of each year in order to qualify for the next grade. An examination is also taken to obtain the baccalaureate at the end of secondary school in order to qualify for university education. Student admissions to the university are "strictly linked to the country's needs and capacity of absorption", and thus, "an annual quota for the number of admissions by institution and by discipline according to the needs" is set by the government, (State Department, Tunisia Moves Ahead, 1975, p.284).

Tunisia is generally recognized as a leader among Arab states on the issue of women's emancipation. Immediately following independence, the government enacted the Personal Status Code as a substitute for Quranic law in the areas of marriage, divorce, and children's rights (Tessler, Rogers, & Schneider, 1978). The code prohibits polygyny (making Tunisia the only Arab nation which has outlawed the practice), and unilateral
repudiation by the husband of his wife. In addition, it permits women to marry outside the Islamic faith, sets minimum ages for marriage (15 for girls, 18 for boys), and gives children the right to choose their own spouses (a decision made solely by the parents in traditional society). The National Union of Tunisian Women (UNFT) was also created to address the problems of health and child care, family planning, employment opportunities for women, and other women’s issues. Today, Tunisia is the only Arab nation in which abortion is legal and free (through the first trimester). Educational programs have helped women by increasing the proportion of female children attending school from 31% (in 1958) to 39% (in 1968) of the total school population (Tessler et al., p.144). In addition to these planned social changes, unplanned social changes have occurred through urbanization, the widespread use of radio, and the introduction of manufactured goods.

However, in the late 1960’s, President Bourguiba became ill and left the country for treatment several times. Power struggles ensued, and although Bourguiba defeated his opponents, governmental commitment to the social transformation program and women’s issues declined. As Tessler et al. found in their survey of attitudes towards women’s emancipation in Tunisia:

Popular support for women's emancipation has declined markedly in recent years and this decline has occurred in almost all social categories examined. Men in particular are more opposed to women's emancipation, and highly educated women, those who at popular levels must
lead the fight for change, are also less in favor than
in the past. (p.153)

In summary, Tunisia is still considered one of the most progressive
Arab states for women's rights. However, as the next section
illustrates, governmental reforms designed to emancipate women do not
necessarily mean greater freedom for the traditional Tunisian woman.

Arab Women in Tunisia

As Nancy Shillings (1980) notes in her discussion of the social and
political roles of Arab women, recent data is "extremely limited and
fragmentary, much of it based on second- and third-hand impressions
rather than on direct field contact with Arab women" (p.117). She goes
on to say that most of the existing data in English consists of a few
studies written by men with little or no access to Arab women, or by
Westernized Arabs who felt compelled to emphasize only the "positive"
(i.e. Western) features of the Arab woman's role. Consequently, such
"research" focuses on the Westernized urban elite, a minority of all Arab
women.

To avoid repetition of the mistakes mentioned by Shilling, this
discussion of Arab women focuses on those women living a relatively
traditional life, (i.e. the majority of women in the Arab world).
Special attention is given to the position and role of women in Tunisia,
although, as very little published research on Tunisian women exists
presently, the topic of Arab women in general allows a greater amount of
relevant information to be discussed.
The Arab socialization of females and males begins at birth. The arrival of a male child is cause for celebration, while the birth of a female child often evokes disappointment. A son insures his parents that they will be cared for in their old age, but a daughter is expected to marry and leave her parents, to live with her husband's family. Generally, speaking, boys are pampered, and girls are not. Boys are breast fed longer than girls, which Patai (1983) attributes not only to the extra consideration given to boys, but also to the mother's belief that she cannot become pregnant while lactating. Consequently, she stops breast feeding her daughter earlier in order to "try again" for a son.

However, despite the lesser amount of attention she receives, the daughter's treatment does have certain advantages. Whereas the boy must undergo an extremely difficult transition from the attentive, caring "women's world" to the harsh, authoritarian "men's world" (at a young age), the girl does not experience this aspect of the socialization process. She continues to mature in the female environment in which she was born, under less pressure than her brother, a situation which Sharabi and Ani (1977) say allows her to develop more freely, and to learn to cope more effectively with her frustration. Furthermore, Sharabi and Ani suggest that this opportunity may account for the Arab woman's ability to accept and work within severe social restrictions in later life.

But the Arab girl is eventually forced to make an adjustment which may be equally as difficult for her, although she is older than her brother (was) when the transition period arrives (Patai, 1983). Her transition occurs at the time of her marriage. Although marriage and motherhood are the primary sources of status and respect for a woman, the
time immediately preceding and following marriage is an exceptionally
difficult and anxious one for many Arab women.

In traditional families, the Arab woman usually marries a man she has
never met (although she may be related to him). Gram (1974) describes in
detail the events and feelings surrounding the traditional Tunisian girl
(typically in her late teens) during the marriage ceremony. At the
height of the celebrations, the (often terrified) bride waits alone in a
room for her as yet unseen husband to join her, while a crowd of
well-wishers waits outside for notification that the marriage has been
consummated. Verification of the girl's virginity is presented in the
form of her blood-stained camisole, (although this practice is
disappearing in all but the most traditional rural areas, [J. Zouari,
personal communication, September 5, 1984]). Gram states that the
marriage constitutes a "severe shock" to the girl, and is "designed to
create a maximum amount of psychological pressure on the female in order
to mold her into a submissive and cooperative member of a new social
group", (i.e. her husband's family), (p.128).

Following the marriage ceremony, the bride moves to her "new"
family. She may be treated like a guest for the first ten days, but
thereafter she is expected to fit in with and serve her husband and his
parents. She is particularly under the domination of her mother-in-law,
who may be both helpful and demanding. If the two can work together, the
work load is less for each of them, but if they cannot, much conflict
ensues. Gram notes that during this phase, the husband and wife see very
little of each other, and "their interaction seems limited to sex and
economic cooperation" (p.132).
Upon the birth of her first child, the young Tunisian woman achieves full adult status. If the child is a son, she is especially congratulated. This is the beginning of the formation of her own family, the group which will provide her with her identity as a woman, wife, and mother.

Views on the role of the traditional Arab woman today range from an emphasis on the inferior position forced upon her by men, to a contrasting emphasis on the relative freedom and satisfaction she can find within the realm of family life and the "woman's world". Proponents of the former viewpoint cite the observance of Islamic law by most Arab nations, which gives women less inheritance and less credibility as a witness than men, and condones polygyny and unilateral repudiation by the male. Supporters of the latter view argue that Islamic law gives women independent legal and property rights, allows polygyny only when all wives can be treated equally (which, practically speaking, they say outlaws the practice), and is designed to protect women, not to exploit them.

Both views contain legitimate points. That is, in the context of Arab culture, Islamic law (theoretically at least) does provide a minimal amount of protection for women, where they would otherwise have none. The practice, however, is often quite different from the religious and/or secular law. Of course, in the Western literature, the view that Arab women are cruelly oppressed by all Arab males has been the focus of most judgments on the Arab female's status. (Ironically, many of these studies were comparisons with the Western woman's status, which their male authors believed to be perfectly equal to that of the Western man.)
More recently, the perspective of the Arab women's role as one which can be fulfilling despite the constraints of a male-oriented society has been considered. Nadia Youssef (1978) explains that although the Muslim woman is subordinate to her husband in the social and economic domains, "within her domain— the women's world— the Muslim wife is given great respect and a considerable degree of familial power" (p.85). This power is evident in her influence on her husband and children throughout their lives, and in the position of respect she holds within her parental home. (Note that Youssef is speaking of Muslim women in general, not specifically of Arab-Muslims.) Similarly, in her study of the Tunisian woman's role, Gram suggests that the traditional woman (in the village of Tazoghrane) is able to find fulfillment and satisfaction within her own social world of women and children.

However, with the development of recent social transformation programs, Gram notes that modernization, rather than improving women's status, may have detrimental effects on women unless they are given specific opportunities to change. As she explains,

Women are protected from all external circumstances that threaten their family identity. While this may heighten the prestige of the family, the woman suffers as other family members orient themselves towards these new and essentially foreign interests. Still a necessary member of her group by virtue of maintaining the home, the woman may find herself in the corner rather than center of the group. Her ignorance of the outside world, in which her husband and children may
now invest much of their time in pursuits no longer immediately rewarding to the family, alienates her from the results of her labor and affection. Her projections no longer comprehend her daughter's lives. She feels like an old woman while yet young—exploited. (p.147)

But Gram concludes, "If given the opportunity, women are prepared to change." Particularly, "younger women are looking for new models of prestige", and if these models can be provided locally as well as in urban areas, women "may be able to create suitable roles for the expression of their more self-conscious identities" (p.166).

Methodological Problems in Research on Arab Women

Several of the methodological difficulties involved in conducting research on women in Arab countries have already been mentioned, including language differences, lack of transportation, a paucity of literature, and difficulty in gaining access to the female population. In addition to these problems, Nancy Shilling (1980) has outlined several other important issues which she has confronted in her own research in the Arab world.

One of the first problems she discusses concerns the definition of relevant terms. Words such as modernization, liberation, and development may be useful and appropriate in the cultures which created these concepts, but may not be particularly relevant in an Arab context. Individualism is not a priority for most Arab women, who place a much higher value on the support they obtain from their families and social
networks. Thus, for example, the middle class Arab woman who does not have to work outside the home, and is not overworked by her household duties, may feel quite fortunate to have a husband who supports her well and "protects" her from the harsh outside world. For her the term liberation may be meaningless.

The second set of problems which Shilling describes are technical. If Western social scientists are conducting the study, problems may include ignorance and insensitivity to local customs, and a lack or absence of trained bilingual research assistants. Female assistants may be particularly difficult to find. In addition, Western social scientists may be suspected of espionage for their own government or for the local Arab government. The responses they obtain in interviews may be biased because participants are afraid or distrustful of them, or because participants want to please or impress them.

If, however, the researchers are Arab, different problems may arise. Individuals being interviewed may think that the questions being asked by one of their peers are ridiculous because "he or she already knows the answer". Local power struggles can occur over the use of the data, and personal biases (i.e. ideological, social class, religious, or educational) may affect the interpretation of the results.

Shilling comments particularly on the use of educated Arab women as interviewers. She notes that these women often see people and issues through a "middle class filter", and project their own values onto other Arab women (p.114). But the use of female interviewers (rather than males) is certainly more practical in regard to personal surveys with women, not to mention necessary, when one considers the effects of the
interviewer's gender on the reliability of the information obtained. A possible solution to these technical problems, and one which is used in the present study, is the use of a team of researchers, which includes at least one man and one woman, of Tunisian and non-Tunisian nationalities.

Regardless of the gender and nationality of the researchers, the field survey approach presents problems in itself. Firstly, surveys are not common in the Arab world, and are often assumed to be related to tax collection or police activities. In countries such as Tunisia, knocking on doors to obtain subjects may result in more closed doors than participants (J. Zouari, personal communication, Sept. 5, 1984). Secondly, random sampling is often impossible due to a lack of "census data, records, maps, street guides, street names, and phone books" (Shilling, p.112). One answer to both of these problems is stratified quota sampling, in which samples are obtained via local contacts and are representative of the important variables under investigation.

In conclusion, many obstacles confront the social science researcher who intends to study Arab women. However, these problems are not insurmountable. With planning, personal contacts, and some patience and flexibility, important questions concerning Arab women, the stressors they face in their daily lives, and the ways in which they cope with these stressors can be answered. The next portion of this paper proposes a study designed to answer some of these questions.
STATEMENT OF THE PROBLEM

In the preceding sections several lines of research have been discussed: cross-cultural research in psychology and psychiatry; studies of the effects of modernization on psychological health and illness in a variety of cultures and specifically in Arab culture; the interactional model of stressors, supports, and psychopathology as a way to conceptualize these processes; Arab-Tunisian culture; and the social position of traditional Arab women. Each of these areas of inquiry was explored in order to clarify the lacunae in the present research on the effects of modernization on developing nations. These gaps include the lack of research on the effects of modernization on non-psychiatric Arab populations, particularly women, and the more precise study of the stressors, problem solving efforts, and types of symptomatology found in these individuals. The study proposed herein attempts to answer some of the questions raised by the existing literature on the effects of modernization on psychiatric disorder in Arab culture, and some of the questions raised by the lack of research on the normal (i.e. non-psychiatric) female Arab population, by studying the relationships of modernization, stressors, problem solving efforts, and psychopathology in Tunisian women.

The Tunisian government is presently committed to modernization and has enacted several national plans in order to accomplish this goal. However, due to economic constraints (and a variety of other social factors), the results of these plans are experienced to extremely different extents in different areas of Tunisia. More precisely, for the major institutions affected by modernization, including transportation,
education, employment, housing, health care, and the media, the following
distinctions can be made between the rural, village, and urban settings
included in this study, thus providing a description of the increasing
impact of modernization from the rural to the village to the urban
areas. (A more detailed description of each setting is included in the
results section.)

With regard to transportation, the rural settlement investigated
herein was physically isolated by the desert terrain. There were no
paved roads within or around the area, no personally owned cars, no
taxi, and only one personally owned moped. In the village, a personally
owned car was a rarity, although economically possible (none of those
interviewed owned a car), taxis were available, a few mopeds were
visible, and some of the village roads were paved (including the road
coming into the village from the highway). In contrast, Tunis has all of
the transport facilities of a large European city, including an
international airport.

Education in the rural setting studied was limited to one elementary
school, with those few children who passed the elementary examination
being sent away to high school. The only work available for most of the
Bedouins was agricultural, with occasional government road work, and one
teaching and two grocers' positions. The village contained at least one
elementary school, and children could live at home while attending high
school. In addition to the types of work available to the Bedouins, the
village also included a few small businesses, fishing, and sewing in the
home for women. Tunis is known for its universities and colleges, and
offers a variety of business, industrial, service, and professional occupations, for men and women.

Housing is another area of contrast. Whereas the Bedouins lived in one-room earthen houses with no plumbing, no electricity, and no toilet facilities, the villagers typically lived in two- to three-room painted houses with running water (a spigot), electricity, and a water closet inside the courtyard. In Tunis, apartments and houses with several rooms, modern plumbing, and electricity are the norm among the middle class.

Health care for the Bedouins consisted of traditional remedies prescribed by the local healer or friends, with occasional visits to a clinic in the next town. Although traditional remedies were also used by the villagers, a clinic in the village was frequented by many of them. Tunis contains not only clinics, but also hospitals and the university medical school.

Finally, modernization has also had varying degrees of influence on the media in these three areas. In the rural settlement, radios were relatively common, but the lack of electricity allowed only battery-operated televisions to be used, and these were rare. Newspapers and other written materials were also rare, understandably so considering the high illiteracy rate for this group. In the village, the majority of the households visited had either a radio or a television or both. Hereagain, printed materials were not commonly seen in homes, although the official literacy rate is much higher than that observed for the Bedouins in this study (see page 143). In Tunis, literacy is the norm for the middle-class, including women, and in the group studied herein,
all had a radio or television or both, and two also had video recorders. Magazines, books, and newspapers were a common sight in these homes.

From the above description of the differences in the rural, village, and urban settings it is clear that each milieu has been affected to a progressively greater extent by modernization. Thus, the opportunity for investigating the effects of modernization at a variety of levels exists in Tunisia. For the purposes of this study, modernization is defined according to Lerner's (1968) definition as the primarily economic "process whereby developing societies acquire characteristics common to more developed societies" (p. 386), but also includes those unique adaptations which occur during exposure to, and acquisition of, the developed country's ideas and ways. That is, in modernizing itself, Tunisia is not becoming a replicate of the modern Western society, but rather, is combining its own unique character with new ideas, in order to achieve a better way of life for the Tunisian people. Operationally, modernization is defined as the level of exposure to and integration of modern ideas and methods, categorized in three increasing levels of the effects of modernization: (1) the rural, (2) village, and (3) urban (i.e. city) environments.

The second variable or group of variables of interest are stressors. Marsella's (1982) definition of a stressor is used with one modification. A stressor is defined as "any event/object/process which elicits a state of change in an organismic system" (p. 242). For this study, only negative stressors are assessed, that is, events, objects, or processes that elicit a state of change which is perceived as desirable although stress-inducing (e.g. a job promotion), are not included.
Because of the difficulties involved in defining the third group of variables as coping, particularly when coping implies personal growth in dealing with stressors (i.e. as opposed to defensive behaviors which do not), the coping or support dimension of the interactional model focuses specifically on problem solving efforts applicable to Tunisian women. The definition of coping strategies offered by Stone and Neale (1984) is "those behaviors and thoughts which are consciously used by an individual to handle or control the effects of anticipating or experiencing a stressful situation" (p.393). However, no coping instrument which would apply to Tunisian women could be found, and many of the behaviors used by Tunisian women to cope with stressors are not necessarily anything more than defensive behaviors. Thus, the conceptualization of this dimension of the model as coping was modified. Instead these behaviors are called problem solving efforts, which although they can be included in the definition of coping strategies, do not necessarily include the potential for growth, and may include defensive and even passive behaviors. In addition, one unconscious coping strategy is included in the checklist of strategies for its importance with regard to Tunisian women—illness, whether or not the woman realizes she becomes ill because of the problem.

The last variable to be investigated is psychopathology, which is defined as the maladaptive behaviors which occur as a result of the interaction of stressors and problem solving efforts. Operationally, psychopathological symptoms are represented by distress symptoms for four dimensions: somatization, anxiety, depression, and psychotic behaviors. These four categories were chosen for their particular applicability to
the expression of disturbance in Tunisian women, and other categories were not included because of time and fatigue constraints.

This study is the first systematic investigation of modernization, stressors, problem solving efforts, and psychopathological symptoms in normal (non-hospitalized) Tunisian women, and as such, is best considered an exploratory study from which more specific questions and hypotheses for future investigations will be obtained. Furthermore, because little if any research exists on which this study's hypotheses could be based, only the general questions to be explored are outlined below.

The first question of interest concerns the effects of modernization on the stressors experienced by Tunisian women. As the literature review has shown, most of the research on this topic has failed to specify stressors reported by individuals experiencing different levels of modernization. Rather, the typical approach has been to bypass the specific stressors of each environment, and simply whitewash the qualitative differences between stressors by defining modernization as the major stressor, and psychosomatic symptoms or psychiatric disorder as the measure of that stressor. The present solution to this problem is to assess the number and severity of stressors as subjectively perceived by the women living with them, in each of the environments. The specific question is whether modernization significantly affects stressors, that is, whether rural, village, and/or urban women differ significantly in the number and severity of stressors they report.

The second main question concerns the effects of modernization on the number of problem solving efforts employed. The sociological writings of Patai (1983), Sharabi and Ani (1977), and Gram (1974) describe the
supportive social atmosphere of the traditional "women's world" in Arab culture, but no attempts have yet been made to quantify such support for comparisons between groups. Thus, the second question asks whether modernization significantly affects the number of problem solving efforts used by Tunisian women.

The third question concerns whether modernization affects psychopathological symptoms (specifically, somatic, anxiety, depressive, and psychotic symptoms). Ammar and his colleagues, who have been working steadily in this field for decades, have consistently found an increase in psychiatric disorders since Tunisia's independence (and concomitant enactment of modernization plans). However, these studies involved psychiatric populations admitted to clinics and hospitals, and thus suffer from the probable confounding effect of modernization on increasing the acceptability (and definitely the availability) of psychiatric services. This third question asks whether modernization significantly affects the number of symptoms reported by Tunisian women in each of the categories listed.

Finally, the question is asked whether modernization, stressors, and problem solving efforts together can explain a significant amount of the variance in psychopathology. This question is an important one in that prior studies have found varying relationships between modernization and psychopathology, and in some cases conflicting results, in Arab and non-Arab populations.
METHOD

Subjects

Participants consisted of 45 married Tunisian women between the ages of 24 and 45. Due to the many problems involved in obtaining random samples in this type of study, the method of stratified quota sampling was employed. An equal number of participants from each modernization level (i.e. 15 rural, 15 village, and 15 urban women) was chosen through social contacts, controlling for the variables of age and marital status (across the three groups), education (within each group only), and living standard (within each group, and between the village and urban groups).

That is, only women within the specified middle-age range were included, as were only women of legal married status (although one "had been married" but was widowed at the time of the interview). Education was not difficult to control within groups, as all of the women within each group were very similar in their educational levels. But as education is linked to modernization, women of similar educational backgrounds across the three groups could not be found.

Similarly, with regard to living standards, the women interviewed were very similar within their own groups. Living standard was judged mainly by the type of house or apartment, occupation of the husband, and occupation of the wife when applicable. For the village and urban groups, only women of middle to lower-middle class standards of living (relative to their particular milieu) were chosen. However, because economics are an integral part of the reasons why the poorer groups of people stay in rural areas, namely, why the poorest Bedouins live in areas relatively isolated from the effects of modernization, rural women
with standards of living comparable to those of the middle-class village and urban women could not be found. The lower living standard of these rural Bedouin women, in comparison to that of the village and urban women, is considered lower-class (in Tunisia), and is representative of rural Tunisian Bedouins in general.

The Rural Group

The rural group consisted of 15 female members of a Bedouin settlement in central Tunisia. All of the women were Bedouins, and with the exception of two women who were raised in a different group of Bedouins, grew up in this particular settlement. All of these women were married, living with their husbands, and, with the exception of one woman with fertility problems (i.e., a husband with fertility problems), all of the other women had children. The mean age of these women was 31 years, and the mean number of living children, 6 (excluding the one women with fertility problems).

The Village Group

The village group consisted of 15 women raised and living in a village located in the northern agricultural region of Tunisia. All of these married women had children, with the mean number of living children being 5. The mean age of the village women was 33.

The Urban Group

The urban group consisted of 15 women who had been raised in, and were currently living in Tunis, or who were raised in another city then moved to Tunis. Only 3 women were raised in a city other than Tunis, 2 of whom were raised in Sousse (population 306,900) then moved to Tunis as young adults, and 1 from Monastir (pop. 274,400) who moved to Tunis at
the age of 10, (INS, 1983, vol.28, p.18). The mean age of this group was 36.

All of the urban women were of a legally married status, however, one woman's husband had been dead five years, and two women were undertaking divorce proceedings against their husbands. Excluding one woman who was unable to have children, the mean number of living children for these women was 3. Two other women had chosen not to have children up to that time, but were planning to in the future.

Materials

Because no questionnaire had yet been developed to assess the variables of interest—particularly one which would have been appropriate for Tunisian women—a questionnaire was developed by the primary researcher, and subsequently refined by the two associate Tunisian researchers, (see Appendix). The questionnaire consisted of four main sections covering the following areas:

1) demographics and general lifestyle;
2) specific problems and problem solving efforts in 11 categories;
3) problem solving efforts used for any problem (a 23-item checklist);
4) psychopathological symptoms of somatization, anxiety, depression, and psychoticism.

The questionnaire was originally developed in English, translated by the bilingual Tunisian male researcher into Tunisian, and subsequently, back-translated from Tunisian into English by the bilingual Tunisian female researcher (see Appendix). For the back-translation, the female Tunisian researcher did not see the English version of the questionnaire.
until she had finished her back-translation. Immediately following the translation, and the back-translation, minor changes in the wording of items were made, several items judged inappropriate for these subjects were omitted, and upon the suggestion of the female Tunisian researcher, two categories of problems were added (contraception, and school expulsion).

Before the first interview, a pilot interview using the questionnaire was conducted with a village woman (in a different village from the one visited for the study). This woman was illiterate, and the only difficulties she had in understanding and answering the questions involved the specification of frequencies and intensities of problems and symptoms (i.e. scaling). This problem had been anticipated prior to the pilot interview, and is discussed below with regard to the refinement of the questionnaire, particularly for those items on psychopathological symptoms.

Section 1

The first section of the questionnaire contained nine demographic items, and five additional items on the woman's general daily habits and lifestyle. The latter items included questions on daughters' education, use of the veil, prayer, diet, and coffee and tea consumption. This portion of the questionnaire was straightforward, and required little elaboration of answers.

Section 2

The second questionnaire consisted of 11 sets of three questions on problem type, coping, and problem severity, respectively. The first three questions (i.e. Set 1) were open-ended and general:
1) The last time you had a problem (any problem), what was that problem?
2) How did you cope with that problem?
3) Was it a big problem or a small problem?
   a. How many times did you have this problem (did this problem occur)?

(Questions 3. and 3.a. were not always appropriate, e.g. for a death.)

The next ten sets of questions followed the same pattern of questioning, except that each set addressed a specific category of problems. These eight areas consisted of: (2) the marital relationship, (3) the children, (4) the family (hers and his), (5) household work, (6) work outside the home (if applicable), (7) health, (8) contraception, (9) death, (10) pregnancy, and (11) a child's expulsion from school. In addition, question prompts were included and used when women did not answer the first question for each area (i.e. "The last time you had a problem with...."). Finally, the initial general question was asked again at the end of this section, in the form of "Have you had any other problems we didn't talk about?"

For example, Set 2 asked the participant to describe a recent problem in her marital relationship, and how she coped with that problem. Rather than directly asking, "Do you have a problem (e.g. in your marriage)?", the above approach was chosen in order to increase the likelihood of a response. That is, the answer to a yes-no question could have been more easily answered with a "no" than a "yes", and thus, such questions would have decreased the likelihood of a descriptive response. Furthermore, the assumption of a problem (in the form of "The last time you had a
problem...") could be easily corrected by the participant if it were false, but was more likely to elicit a descriptive response. And finally, for the rural and village women in particular, these questions had to be asked in the most concrete form possible, rather than in an abstract, general way such as "Do you generally have a problem with...", (as the latter form would require a less specific, more abstract answer).

The scoring system for stressors (i.e. problems) consisted of coding 0 for "no stressor" and 1 for an acknowledged stressor in the specified area. Problem severity was scored 1 for a "small (minor) problem" and 2 for a "big (major) problem" according to the woman's report; in addition, severity was also later scored by the researcher as 1 for an incident (i.e. a problem that occurred once), and 2 for a chronic or ongoing problem. Additional stressors were scored when mentioned by the participant in response to the general "other problems" not included in the ten areas.

A total stressor score for each woman was obtained by multiplying each stressor scored as 1 by its severity rating, and adding the products. For example, the stressor of ongoing marital conflict would be scored 1 for the presence of a stressor in the marital area, possibly 2 for a "big problem" (although this would depend on the woman's assessment), and 2 for a chronic problem (if it were ongoing), yielding a marital stressor score of 1x2x2 = 4. The woman's total stressor level would consist of the sums of these individual stressor scores for all 11 problem areas, and any additional areas mentioned by her.

The intention of this approach to the assessment of stressors was to obtain a score representing not only the number of problems experienced
by the women as stressors, but also to include a measure of the severity of each stressor. While women were able to rate the severity of each stressor only as "big" or "small", an assumption was made by this researcher concerning the "chronic"/"incident" distinction that a chronic problem is perceived as a greater stressor than a problem that occurs only once. As Kanner, Coyne, Schaefer, and Lazarus (1980) found, daily minor problems (which they called hassles) were "a considerably better predictor of psychological symptoms than life events" (p.20). Recognition is given to the possibility that this assumption does not hold true for all problems, that is, that there may be problems which occur as one-time events, that are more distressing than certain minor ongoing problems.

However, as Tessler (1973) has noted in research involving the measurement of abstract concepts in Tunisia, "if a respondent is forced to distinguish nuances which are to him arbitrary in the first place, the problem is obviously complicated", and "Researchers in developing nations may thus have to forfeit the use of semantic differentials, Likert-type items, and other refined survey techniques" (pp.142-143). Thus, the described method for obtaining an estimate of stressor levels is a compromise between subjective assessment of the severity of the problem (i.e. as the women perceive their stressors), and the practical constraints of this particular group of individuals on the research being conducted.

An attempt was made to categorize the open-ended responses to the coping questions in this section on stressors, however, even with the definitions of the categories provided by Stone and Neale (1984), too
many of the responses fell into more than one category. The checklist of problem solving efforts had been included prior to the study in anticipation of this problem, and subsequently, because of these difficulties, was used as the primary measure of problem solving efforts. Additional information obtained from this section was difficult to quantify, and consequently, is included in the descriptive section of the results.

Section 3

The third section of the questionnaire consisted of a list of 22 problem solving efforts, for each of which a woman was asked:

1) Did you ever do this when you had a problem, to help the problem?
2) For what kind of problem?; and
3) Did it help?

The second and third questions in these 22 sets were asked as a check on the answers to the previous section, and to be sure that the woman was actually thinking of a specific problem (i.e. not simply answering with a "yes" or "no"). The third question provided an indication of the effectiveness of the problem solving efforts strategy for a woman, from her point of view.

In addition to the 22 strategies, the question "Have you done anything else when you had a problem, to help the problem?" was asked, and if the response was "yes", the second and third questions were added, and the question repeated until the answer was "no" (i.e. nothing else).

This portion of the questionnaire was developed with the intention of assessing specific coping strategies, however the problems involved in distinguishing between defensive or passive behaviors, and coping
behaviors implying success in handling the problem, prohibited the labeling of this dimension as coping. Furthermore, there is presently no agreed-upon conceptualization of coping, which has been investigated variously as a dynamic process, or as consisting of categories or styles. Stone and Neale (1984) summarize the state of the measurement of coping in psychological research, noting, "...despite the frequency with which coping has been used in the literature, neither an agreed upon typology of coping nor an adequate method of assessing coping is currently available" (p.892). They go on to discuss the drawbacks of various approaches that have been used, including the problems of extreme length and reliability in interview assessments, and the lack of attention to the process of coping in personality inventories. Their series of studies concludes with a classification of coping into nine categories: "(a) distraction, (b) situation redefinition, (c) direct action, (d) catharsis, (e) acceptance, (f) seeking social support, (g) relaxation, (h) religion, and (i) other" (p.898).

In order to provide some structure to the development of this portion of the questionnaire, the checklist was designed to include one or more behaviors for each of the coping categories outlined by Stone and Neale (although many fit more than one category), to be applicable to Tunisian women, and to be comprehensible by illiterate women. In addition, the category of social support was divided into support from family members and/or friends, and support from social services (i.e. a doctor). Items were added, deleted, and/or changed following the initial translation of the questionnaire by the Tunisian male researcher, and also following the back-translation of the questionnaire by the Tunisian female researcher.
Obviously, this checklist does not include every possible problem solving effort used by Tunisian women, although it does provide for the addition of items not listed, and includes these additional strategies into the problem solving efforts score.

Problem solving efforts (including additional strategies suggested by a woman) were scored as present (1) or absent (0), (i.e. used or not used by a woman to cope). Thus, the total problem solving efforts score was equal to the number of self-reported problem solving efforts. The data on the efficiency of the problem solving efforts was not included, as women's answers depended on the problem they were thinking of (a fact that several women noted).

Section 4

Finally, in order to measure psychopathological symptoms, the somatization, anxiety, and depression subscales, and items from the psychoticism subscale of the Symptom Distress Checklist (SCL-90) were included (more specifically, the revised SCL-90; Derogatis, 1977). The entire SCL-90 contains 90 symptoms, a number judged too large for the present study (i.e. requiring an attention span considered unreasonable for illiterate groups unaccustomed to such an approach.) Consequently, the somatization, anxiety, and depression subscales were chosen as the most appropriate measures for a normal female Tunisian population (based on the research on manifestations of psychological disturbance in Arab women), and in addition, items from the psychoticism subscale were also included. (The excluded subscales consisted of obsessive-compulsive, interpersonal sensitivity, anger-hostility, phobic-anxiety, paranoid ideation, and an additional items category.)
The four subscales (as used in the present study) consisted of 12 somatic, 10 anxiety, 12 depressive, and 4 psychotic symptoms. The only change made in the original SCL-90 somatic symptoms list was the omission of the word "lower" in "pains in lower back". One SCL-90 anxiety item ("feeling fearful") was omitted as redundant, another ("feeling that familiar things are strange or unreal") was omitted due to translation problems, and two anxiety symptoms specific to Tunisians were added ("blurriness", and "darkness"). For the depressive symptoms, "feeling everything is an effort" was omitted as redundant, "loss of sexual interest" was omitted as inappropriate, "feeling ashamed" was added, and "thoughts of ending your life" (a taboo according to Islamic religious beliefs) was changed to "thoughts of wanting to die". The difficulties involved in translating the relatively abstract and/or inappropriate concepts involved in the psychotic symptoms resulted in the inclusion of only four of the SCL-90 psychoticism items.

The SCL-90 is normally read and completed by the client/patient herself. However, two-thirds of the participants in this study were illiterate, thus, the question "Do you experience any of the following?", followed by the symptoms, were read to them. The initial intention of the primary researcher was to also outline the parameters of each symptom (e.g. frequency, duration, and intensity). (In its original form, symptoms on the SCL-90 require a self-rating of from 0 (not at all) to 4 (extremely).) However, this proved to be an impossible task for the illiterate woman involved in the pilot interview, and after a discussion of this problem with the assistant Tunisian researchers, this objective was given up as unrealistic.
In conclusion, responses for each symptom were coded as present (1) or absent (0), and a score for each symptom category list (i.e. somatization, anxiety, depression, and psychotic symptoms) obtained by adding the scores for that category.

Procedure

The field work for this study was conducted by a research team consisting of three individuals. The primary researcher, Pam Hays, is an American woman, who, having visited Tunisia for the first time in 1980, became interested in the psychology of Tunisian women, and the effects of modernization on these women. Ms. Hays does not speak Tunisian, although she was able to learn some rudimentary phrases and words to facilitate her initial contacts with the rural and village women. She does speak French, which provided her with the opportunity to talk directly (i.e. without interpretation) to several of the urban women (although each interview itself was always conducted in Tunisian).

The first assistant researcher was Jawed Zouari, a Tunisian national who has been living in the United States for the past five years as a permanent resident, and who at the time of this study was a student at the University of Hawaii. He is fluent in Tunisian, French, and English. Mr. Zouari's work consisted of translating the original English version of the research questionnaire into Tunisian, and arranging interviews and accompanying the two female researchers when socially appropriate and/or necessary. Mr. Zouari also served as an invaluable consultant on customs and social norms of the three groups of Tunisian society under investigation.
The second assistant researcher, Saida ben Saad, is a resident of the village of Kalaa Kebira, Tunisia (This was not the village studied in the present investigation.) She holds a master's degree in English from the Faculté des Lettres de Tunis, Institut de Langues Vivantes de Bourguiba. Her work consisted of the back-translation of the questionnaire, reading the translated questions to the women being interviewed, interpretation of the responses into English (which were then recorded in written English by Ms. Hays), and interpretation for Ms. Hays during casual social interactions with the women. In addition, Ms. ben Saad's social contacts and intimate knowledge of Tunisian village culture provided valuable information in the understanding of women's responses.

The arrangement of interviews varied widely, depending on the group being investigated. Thus, the procedure for each group is described separately below. In general, however, it can be noted that in none of the interviews was a man present, and with the few exceptions of a young child or intimate female friend or relative of the woman being interviewed, the interviews involved only the woman, Ms. ben Saad, and Ms. Hays. Concomitantly, the length of the interviews varied from between 1-1/2 to 5 hours, depending on the woman and the social situation, and in many cases, the researchers re-visited the women on a social basis.

**The Rural Group**

Through Saida ben Saad's husband, Mr. Mohammed ben Saad, the research team was introduced to a member of the Bedouin settlement, who in turn, introduced the team to several women willing to be interviewed. Within a
day, news of the research team's arrival and business was communicated throughout the settlement, and Mr. Zouari was able to introduce himself directly to the Bedouin women, and to the husbands of several women. He arranged the interview times, and Ms. ben Saad and Ms. Hays then walked from house to house according to his arrangements. The research team was living in a village approximately 50 miles from the Bedouin settlement, and drove to the settlement in the morning, and returned to the village each evening.

The Bedouin women were remarkably friendly to the researchers, always offering refreshments of tea, coffee, occasionally a soft drink, and hard-boiled eggs. The researchers were served dinner at three of the households, with the female researchers eating with the women, and Mr. Zouari eating in another room with the men.

At the beginning of each interview, the woman was given packages of tea and sugar in appreciation for her participation. The purpose of the study was explained as an investigation of Tunisian women and their daily problems and lifestyles. Ms. ben Saad also explained that there were no right or wrong answers, that the questions were only on what the woman "thinks and believes". Ms. ben Saad also answered questions about herself and Ms. Hays, as most of the Bedouin women were curious about the researchers and their lifestyles. For the reading of the questionnaire items, Ms. Hays initiated the question in English from her English version, and Ms. ben Saad then read the item from her Tunisian form, and translated the woman's response into English. Ms. Hays recorded the response in writing on her English form of the questionnaire. For
several of the questions, the previously specified prompts were used to encourage a response.

The Village Group

Also through the ben Saads' and Mr. Zouari's social contacts, the research team was able to gain access to 15 village women—by far the most difficult group to meet. The team lived in this village for approximately one month, although during portions of this month; Mr. Zouari and Ms. Hays commuted from Tunis to the village. Several of these interviews were arranged directly by the two female researchers with the women, and others were arranged by Mr. Zouari with the women's husbands. The general attitude towards the researchers was more reserved and suspicious than that found in the Bedouin group, and at times resulted in the cancellation of an interview when it was apparent that the woman did not want to talk, or that her husband did not want her to talk with the researchers. Whereas the Bedouins had appeared unconcerned when told that all of the information obtained would be used anonymously, the village husbands and wives repeatedly asked for assurances of anonymity, (e.g. some being concerned that it might be broadcast on Tunisian radio).

Once the interviews had begun, however, the women who agreed to speak were also exceptionally hospitable. Hereagain, the researchers took a small gift of tea or fruit to the women's homes (occasionally a woman's friend's home), and were served tea, coffee, fruit, and/or soft drinks, at every house, (and all at some houses). No meals were eaten during these interviews.

The interview procedure was identical to that of the Bedouin group. That is, Ms. ben Saad explained the purposes of the study, read the
questions in Tunisian, translated them into English, and Ms. Hays recorded them in writing.

The Urban Group

The urban women were similarly difficult to contact for interviews, although for different reasons. Whereas the researchers were unable to meet the village women because they stayed in their homes most of the day, the researchers had problems meeting women in Tunis (who had to leave their homes every day to go to work), because of the latter's busy schedules, and/or the inappropriateness of introducing oneself without a mutual acquaintance. Again, social contacts played a pivotal role in obtaining the first few women for interviews, who then introduced the researchers to other women willing to be interviewed.

The Tunis interviews were conducted in the women's homes, (or a woman's friend's home), with the exception of one woman who was interviewed at her place of employment, and one woman who was interviewed in Ms. ben Saad's neighboring apartment. The researchers took fruit and/or pastries on their visits. The urban women were very hospitable, serving refreshments, sometimes dinner, and introducing the researchers to other women available for interviews. When dinner was served in the urban homes, the men and women ate together, around a Western-style table with chairs.

The purposes of the study were explained, and the questionnaire was read as it had been for the two previous groups, with one exception. One of the urban women spoke English fluently, thus, for her, the questions were asked by Ms. ben Saad in Tunisian, but the woman replied directly to Ms. Hays in English. Many of the urban women began the interview by
replying in French, but agreed to answer in Tunisian when the need for consistency was explained.

Data Analysis

Three sets of analyses were conducted on the data. The first set of analyses consisted of descriptive statistics, with the purpose being to provide an overview of the general characteristics of each group's lifestyles and habits.

The second set of analyses consisted of a narrative description of each of the three environments and the women living therein. The purpose of this section is to give the reader an idea of the commonalities and the differences between women, within and across the three groups, and to describe the types of stressors experienced in each milieu. Furthermore, as much of the information obtained in this study was difficult, if not impossible to quantify without losing the depth and breadth of responses, this section of the results also provides the reader with information that is valuable in interpreting the quantified results.

The third set of analyses consisted of a multivariate analysis of variance and a series of analyses of variance of the effects of modernization (as the independent variable) on stressors, problem solving efforts, somatization, anxiety, depression, and psychoticism (as the dependent variables). Also, a canonical analysis was performed for the effects of modernization, stressors, and problem solving efforts (as independent variables) on the psychopathological symptoms (the dependent variables).
RESULTS

Section 1 Descriptive Statistics

The Rural Group

As noted in the "Method" section, the mean age of the rural women was 31 years, and their mean number of living children, 6.

The most common dwelling for these women was the one-room mud hut, with 11 women living in such dwellings, and the remaining 4 women living in one- or two-room stone houses. The mean number of people in a woman's house (i.e. her family size) was 8. Twelve of these families were nuclear (consisting of the woman, her husband, and their children only). Three families were extended, and included (in addition to the woman's nuclear group), her father-in-law (in two cases), or her husband's family of origin (in one case). These three extended families owned three of the four stone houses represented in this group, the houses being owned by the husband's father in all three cases.

Formal education for the Bedouin women was negligible. Eight women had never been to school. Of the other 7 women, 1 went through the first grade, 1 through the second grade, 1 through the third grade, 3 through the fifth grade, and 1 through the sixth grade (all primary school). Of the 14 women with daughters, 13 said that their daughters had been to school (including left school), were currently going to school, or would be sent to school when the girls are old enough.

A note should be made here that although school is mandatory for all children in Tunisia, the law is not always enforced in rural areas. Furthermore, if a child fails the exam at one year's end, and cannot pass in a subsequent try, he or she is expelled. Another common reason given
for keeping children home from school in this area was not having the money for school supplies.

All of these Bedouin women were married, for an average number of 13 years. Twelve of them married a man chosen by their families; 3 "chose" their husbands themselves. (Several women mentioned that their husbands were also their cousins—a not uncommon practice in rural areas, and villages in Tunisia.) "Choosing" did not necessarily mean that the 3 women spoke directly to the men they wanted to marry, (although the Bedouin women, unlike the village women, are not forbidden to speak with non-family males.) It is more likely that these women suggested their choice to their families, who in turn arranged the details, as it is the family's duty to plan its children's marriages in this area.

The Bedouin women's husbands worked in various types of employment: 3 were unemployed, 6 were fellah (land-owning farmers), 1 was a laborer (e.g. on government road projects), 2 worked as both fellah and laborers (depending on the availability of employment), 2 were grocers, and 1 worked as both fellah and the only schoolteacher.

Personal habits and lifestyles were very similar among the Bedouin women (relative to the similarities within the other two groups). None of the women wore a safsari or veil in their settlement, although 9 women wore safsaris when they went to the city. None of the women were adverse to talking directly with a man, including the male researcher they had never met before. None of the women did the daily prayers, but this is understandable in view of their lack of education. One must memorize and recite the prayers, and know how to do the proper body cleansing and exercises—all of which require a teacher (i.e. anyone who knows the
procedure). Such knowledge was unavailable to these women, a fact which appeared to be embarrassing or shameful for several of them. Finally, all of the women worked within their own homes, and in addition, 9 women also worked in the fields.

Diet is also an integral part of lifestyle, and as such, was included in the list of lifestyle questions. In addition to obtaining answers to the question, "What did you eat for breakfast, lunch, and dinner yesterday?", the researchers also had the opportunity to eat meals or refreshments with all of the Bedouin women. Diet was found to be very similar for the Bedouin women, consisting of a breakfast of coffee, milk, bread, and olive oil; a lunch of chakchouka (tomato and onion sauce) with vegetables or eggs and bread; and a dinner of macaroni and/or chakchouka with meat or eggs and bread. Fruit was not eaten daily in most of the families, although it was available during the summer months. Fruit was served at the three homes where the researchers ate meals, although these were also the "wealthiest" of the 15 families (relative to this settlement, of course).

In every house, the researchers were served tea or coffee. Tea was used more commonly in this group because it was less expensive. The mean number of glasses of tea consumed by the women per day was 3; coffee, .4 (i.e. about half a glass). Although a glass holds only approximately 2 ounces of liquid, both tea and coffee were made strong and heavily sweetened with sugar.

Finally, with regard to lifestyle, the use of contraceptives is an extremely important point for any interpretation of the effects of modernization on Tunisian women. Within the rural group, only 5 women
reported using any contraceptive method: 3 were using intrauterine
devices, 1 was refusing to have sex with her husband, and 1 woman's
husband agreed to withdraw before ejaculating. Excluding the woman with
fertility problems, the other nine women all considered the issue of
contraception and/or continual pregnancies a problem.

The Village Group

The village group of women consisted of 15 married women, with a mean
age of 33, and a mean number of 5 living children.

The village homes were similar in their traditional style and
architecture (with the exception of the temporary summer huts), and
contained a mean number of 9 people per home. Of the 15 families, 9 were
nuclear, and 6 were extended. The 6 extended families consisted of the
following 4 households in which the woman's husband owned the house, that
is consisting of the woman's nuclear family, plus:

1) the woman's mother-in-law and sister-in-law;
2) the woman's mother;
3) the woman's adult children and their families;
4) the woman's sister-in-law and the latter's family;

and the 2 extended families in which the woman lived with her own nuclear
family, plus:

1) the woman's mother-in-law, in the latter's house; along with the
adult children of the mother-in-law, and their nuclear families;
2) the woman's parents, in the parents' house.

In sum, 13 of the 15 women lived in houses owned by their husbands— a
factor that is significant in determining the power distribution among
household members. That is, the woman who lives with only her nuclear family is the female authority (i.e. among her children) in that house, whereas a woman who lives with her mother-in-law, in the latter's house, will be under the authority of her mother-in-law.

As with the Bedouin women, formal education for the village women was also negligible. Interestingly, even more of the village women had never been to school (10), a finding that may be explained in terms of the greater social restrictions (i.e. against leaving the house) placed on village girls and women. Of the remaining 5 village women, 1 attended school through the fourth grade, and 3 through the fifth grade (1 did not answer the question). All of the women had one or more daughters, and their girls had either been to school, left, or would be sent when old enough.

With regard to marriage, 12 women said their marriages were arranged, and 3 women said they chose their husbands (several mentioning that their husbands were also their cousins). The qualification of this latter statement for the Bedouin applies to the village women also- (i.e. "choosing" referring to the suggestion of a mate by women to their families, not to direct discussion with the man). The mean number of years these village women had been married was 15. The husbands worked in a variety of occupations: 3 were unemployed, 9 were laborers, 1 was fellah, 1 was a grocer, and 1 was an imam (religious leader).

Concerning personal habits and lifestyles, only one village woman said that she worked outside of her home, (i.e. in the fields). (Although one other woman was known to the researchers as having worked
outside of her home, she did not admit this information.) Concomitantly, none of the women ever went out unveiled in the village. (Although two women said they walked on a nearby beach without the safsari, and another said she did not wear it on rare trips to Tunis.) The village women did not converse with men who were not their family members, and for these interviews, arrangements were either conducted by the female researchers directly with the women, or indirectly by the male researchers with the husbands of these women. Fourteen of the women performed the daily prayers.

The diet described by village women was nearly identical to that described for the rural women, with the exception of a greater availability and consumption of fruit by the village women. The researchers ate many meals in another village, although not with women in this particular village, and found the same foods cooked and served there too. Food preparation was also similar, using the charcoal *canoon* (a pottery grill), but most of the village homes also had one or two gas burners and a refrigerator, which the Bedouins did not have. The researchers were served coffee, tea, melon, and soft drinks during the village interviews. The mean number of cups of tea and coffee consumed by the village women was one cup of each per day.

With regard to contraception, 9 of the village women reported using a contraceptive method: 4 had had tubal ligations, 3 were using the IUD, 1 was taking the Pill, and 1 was using a combination of the Calendar method and a traditional method (eating a specific seed). In addition, one woman's husband was impotent.
The Urban Group

The urban group consisted of 15 women living in Tunis, including one widowed woman, and two women undertaking divorces. The mean age of these women was 36. Within this urban group, there was a greater variety in individual lifestyles than was found within the rural and village groups.

As with the Bedouin group, 12 of these women were living in nuclear families, and 3 in extended families. The latter 3 women included one woman who was in the process of obtaining a divorce and living with her family of origin again; 1 woman living with her husband (no children) in her mother-in-law's house; and 1 woman living with her nuclear family and her brother-in-law's nuclear family in a big house (ownership unknown).

With regard to formal education, all of the urban women had attended school, with a mean number of 10 years—a sharp contrast to the rural and village groups. The range of years spent in school was also much greater: 1 woman attended a religious school for five years; 2 women attended school through the fifth grade, primary; 1 through the second grade of secondary school; 3 through the third grade, secondary; 2 through the seventh grade, secondary (without receiving a baccalaureate); 1 through the seventh grade, secondary (with a baccalaureate); 1 through two years of university; and 1 through three years of university. Of the 12 women with daughters, all of their daughters had either been to school, were currently attending, or would be sent when old enough.

The mean number of years of marriage for this group was 13. Although the legal status of all 15 women was "married" at the time of the interviews, 1 woman's husband was dead, and 2 women were in the process of divorce (1 of these 2 was still living with her husband). Thirteen of
the women "chose" their husbands, and 2 were married by family arrangement. In the case of Tunis women, however, choosing a husband had sometimes included direct contact between the woman and man independent of their families (typically in a work setting).

The husbands' occupations included 5 laborers (chauffeurs, business and factory employees), and 10 "professionals" (i.e., white-collar workers- accountants, government and business administration workers, and a teacher).

The mean number of children for the urban women was 3, (excluding the one woman unable to have children). Of the 14 women capable of having children, 2 did not have any children: 1 of these was newly married and using contraceptives to prevent pregnancy, although she planned to have children in the future; the other woman had miscarried once, but soon after began divorcing her husband, and thus had never given birth.

Excluding the woman unable to have children, the woman whose husband had died, and the woman not living with her husband, the remaining 12 women were either using some method of contraception, or had used some method in the past. At the time of the interviews, 4 were using the Calendar method, 2 were taking the Pill, 2 had had tubal ligations, 1 had her husband withdraw before ejaculating, 1 aborted rare pregnancies, 1 was pregnant but planning to return to the Pill, and 1 had recently given birth and was planning to resume use of an IUD and/or the Calendar.

Finally, personal lifestyles also varied among the city women with regard to employment, veiling, and prayer. Only 3 women did not work outside their homes. Of the other 12, 7 worked as secretaries, 1 as a
teacher, 1 as a salesperson in her father's store, 1 as a kindergarten school administrator, 1 as a nurse, and 1 as a hospital midwife. All of the women walked unveiled outside of their homes, although one woman noted that she veiled herself on Sundays (only) when she goes to the hammam (public bath) and marketplace. (Interestingly, she was also the woman involved in an embarrassing divorce procedure which could explain her modesty - which was exceptional for a formally-educated woman working as a nurse in Tunis.) The practice of the daily prayers was also variable: 9 women performed the prayers, and 6 did not.

Despite the convenience of gas stoves, refrigerators, and running water in all of the Tunis homes, food preparation and the type of food eaten were similar to that found in the Bedouin and village homes. Two differences included the more frequent use of French-style store bread than homemade Tunisian bread, and the more frequent consumption of meat and fish. Researchers ate meals in several Tunis homes, and were served the same refreshments in all, with the addition of pastries in some. The mean number of glasses of coffee and tea consumed by the urban women was one cup of each per day.

No other Western-style kitchen appliances were found in the urban homes, (i.e. no dishwashers, can openers, electric mixers, garbage disposals, etc.). Whereas the food preparation was still relatively traditional and time-consuming, most of the urban women also worked outside of their homes. In six cases, a maid was hired to do, or help with, the cooking and housework.
Section 2 A Narrative Description of the Rural, Village, and Urban Women

The results of the second analysis is reported in the following section. This portion of the results involves a more anthropological approach to describing the non-quantifiable information obtained in the course of this study. The preceding section has provided a statistical presentation of the commonalities and differences between the three groups of women, however, this obviously does not give a complete picture of the similarities and differences between the three environments, and between the women within each group.

This second analysis is particularly important for readers unfamiliar with Tunisian culture, and can provide an idea of the habits, beliefs, and practices which are common to all of Tunisian society, specific to a particular group within Tunisian society, or unique to an individual woman. Thus, for these purposes, the following section provides (for each group) a description of the environment, a description of a woman's typical day in that environment (excluding the urban woman), and finally, a description of the woman herself.

To protect the identity of these women, their names have all been changed. Furthermore, the real name of the Bedouin settlement has been changed to **Douar** (Arabic for "a rural area"), and the name of the village, to **Karia** (Arabic for "village"). In a few cases, identifying features have been altered (e.g. the occupation of the one Bedouin woman's husband who was the only teacher in the area). In addition, the description of a typical day in the Bedouin and village women's lives is actually a composite of several women's stories. A typical day for an
urban woman was not described because of the greater variation in daily activities between urban women, depending on their home and/or outside occupations.

**Douar**

Douar is a Bedouin settlement of approximately 1200 individuals, located in the interior desert area of Tunisia. To reach Douar by car from the main road, one must drive 8 kilometers on a gravel road, followed by 4 kilometers on a dirt path of tire tracks. During the winter, rains turn the tracks into mud, making car travel impossible, and isolating Douar even further.

The two most striking features of the environment here are the scorching heat and the starkness of the land. This is desert, marked only by low scrub brush, and the remains of three stone buildings abandoned years ago by the French. One can see for miles, and although tiny trees in a distant settlement are visible in the north, what appear to be huge lakes in the distance are only mirages on the sand.

The entrance to Douar is distinguished only by the sight of a few individuals, and occasionally a couple, harvesting wheat in the fields on the outskirts of the settlement. There, the tire tracks end, and one can see several small earthen houses the color of the ground, a one-room building of concrete, and a small whitewashed marabout site (where a saint is buried) topped by a brightly-colored flag waving in the hot wind. Because of the heat and the blinding, wind-blown dust during the day, few people can be seen walking outside of their houses, except to make necessary trips to the well (the women) and to the two mud huts called grocery stores (the men).
The total land mass of Douar is 3197 hectares (approximately 8000 acres). The settlement contains 17 productive wells, no running water, no electricity, and no paved or unpaved roads. There are 178 independent households, one primary school with one teacher for children ages 6 to 12, and two small grocery stores housed in small (15 x 10 feet) mud huts.

Douar can be divided into two general areas by its superficial appearance. The first area is at the southern entrance and is characterized by flat, dusty land marked by 10 to 12 mud huts (all houses except for one, which is a grocery store), one concrete house, one stone well, and several haystacks. There is very little of the tall, prickly pear cactus found in the adjacent area, and no trees, i.e., nothing to cut off the view from one house to another.

However, several hundred feet into the settlement, the cactus grows up to 12 feet high, forming natural walls between the houses. The cactus also gives some shade to the animals, provides a "private" toilet area, and cuts down on the dusty wind that blows freely across the open areas. There are sole trees here and there, but overall they are rare. The school, the (Neo-Destour) Party building, several concrete and mud houses, and the other mud grocery store are located this area.

The mud houses of Douar are nearly identical in structure and appearance. The rooms and walls are made of a mixture of earth, water, and straw, that hardens in the sun, but melts in the rain. Each room consists of four mud walls, a dirt (or sometimes rough concrete) floor, and a low mud roof supported by cut tree branches. A few of the tidier houses are whitewashed on the inside. Where there is more than one room, additional rooms are adjacent but separate, so that one must walk outside
(into the courtyard) to go to another room. Additional rooms may be used for livestock (e.g. a cow, sheep, or donkey), weaving (i.e. to house the loom), and cooking when the weather is bad. The typical home consists of one or two rooms surrounded by connected mud walls approximately 5 feet high and 6 inches thick, forming a petite courtyard. Some Douarans also pile tumbleweeds around their houses, to increase the feeling of privacy.

The main room of the earthen house is typically 15 feet long, 10 feet wide, and 7 feet high. It has one wooden door which opens into the courtyard, and one or two holes carved in the wall for windows. On one side of the room is a raised platform built of earth or wood, with rugs, blankets, and pillows forming a bed the width of that side. The parents of the family sleep on this bed, while the children sleep on rugs on the floor.

The other half of the room often has a European-style wardrobe containing clothing, a broken mirror, cooking utensils, one or two treasured photographs, and any other valuable items. The floor is covered with hand woven rugs for sitting, and a low table for eating is kept by the door.

Recently, the Tunisian government has given Douarans money to build concrete houses, and several of these exist presently, along with the beginnings of a few under construction. For many of the women interviewed, building a concrete house was cited as one of their hopes for the future.

The typical concrete house is a whitewashed, one-room building with a 10-foot-high ceiling, about twice as wide and long as the mud houses. The concrete house consists of four concrete-rock walls and roof, with
one or two windows, and one door opening into a courtyard formed by two or three more walls. One concrete house in Douar has three (adjacent but separate) rooms, but it is an exception. Still, the concrete floor inside all of the concrete houses greatly reduces the dust and dirt in the room. The contents of the house are similar to those found in the mud houses: a wardrobe, home-made bed, low table, and rugs.

The men of Douar either work in their fields, buy and sell sheep, work as laborers for the government, or are unemployed. In addition, one Douaran man who received his baccalaureate works as the schoolteacher, and two other Douaran men work as grocers in their own stores next to their houses. None of them own an automobile or truck, and the only way out of the settlement is to find a ride with a passing truck, or go by donkey or camel. After work, and all day for the unemployed men, the grocery store is the social center. Women never go to the store, but men spend most of their free time there. They sit and talk for hours at a time, and play cards, often gambling for cookies and tea to break the monotony. As one woman put it, "The owner of my house [i.e. her husband] stays at the store all day and evening, returning home only to eat and sleep."

In contrast, the women of Douar stay in or near their homes all day and evening. A woman's daily activities are centered around her home, and she leaves it only to get water from the well, or to visit a female friend or relative. But her behavior is restricted by poverty, more than by social rules. That is, the Douaran woman is not forbidden to leave her home, as is the conservative Tunisian village woman; she simply has nowhere to go.
The Douaran Woman

Some generalizations can be made about all of the women interviewed, and with rare exceptions, the female population of Douar. None of the women interviewed attended school past the sixth grade, and having attended school at all was exceptional. None of the women did the five daily prayers, as the prayers must be learned, and either initially read or memorized from a teacher—a rare person in Douar.

The safsari (a large piece of white cloth worn by Tunisian village and some conservative urban women to cover the entire body) is not worn in Douar at all. Most of the women, however, do wear the safsari when they go to the outskirts of the closest city (approximately 27 kilometers away) to visit the marabout (the tomb of a saint). And finally, every woman interviewed had three or more living children, unless she or her husband were physically unable to have them.

A typical day in the life of a Douaran woman.

Zohra is a 31-year-old Bedouin woman, a member of one of the five large families that make up the settlement of Douar. Her parents were nomads who lived year-round in goatskin tents and herded sheep, goats, and camels for a living. When the French left Tunisia in the late 1950s, the five families settled in this desert area now called Douar (the true name is actually a form of the largest family's name), each nuclear family building itself a relatively permanent earthen house with earthen walls around it. Zohra was born in one of these houses, on a bed made of earth, just as her children were, and continue to be born.

Soon after Zohra turned 16, her parents arranged for her to marry a man from their family, in fact, her cousin. Her opinion was requested,
of course she agreed, and the marriage took place. She and her new 
husband moved into their own mud house, to begin their own nuclear 
family. Fortunately for Zohra, she became pregnant within the year, and 
she worked in her house up until the baby's birth. Labor was an 
excruciatingly painful new experience, one which would be repeated too 
many times. But afterwards, her female neighbors and family members came 
to visit her and her son, and as is the custom, each brought her money, 
which she would later give her husband to buy her a special food at the 
grocery store or a piece of clothing the next time he visited a village. 
Zohra was happy with her new baby boy, and looked forward to having 
another.

Zohra has 6 children now—three girls, and three boys—the youngest 
of whom is 9 months old. During her 15 years of marriage, she has had 
one miscarriage, and a total of 7 children, but one child died at the age 
of one year. On the average, Zohra knows she gets pregnant about once 
every two years, just after she stops nursing the most recent baby. But 
this knowledge does not affect her life, nor does it change the number of 
children she has, and will have.

It is the dawn of another hot day in Douar. Zohra's youngest son, 
sleeping on the floor between his brothers and sisters, awakens and 
starts to cry. Zohra gets up off the hard, rug-covered, earthen bed, 
reties the brightly-colored scarf on her head, and takes the shirt she 
wore yesterday out of the cupboard. She puts the shirt on, then replaces 
the dirty darleila she slept in, over her shirt. Her darleila, like 
most, is a long dress made of one piece of cloth, held on with a belt at 
the waist, and pins at the shoulders. The loose folds of material
provide handy pockets and a coolness not found in tighter clothes. Zohra ties a belt of yarn around her middle, and fastens the darleila at the shoulders with safety pins, instead of the expensive traditional silver pins. Then she picks her baby up off the ground, and places him in the front pouch of the dress. Her breast immediately quiets him.

While the rest of her family sleeps, she begins her chores before the heat becomes unbearable. Because she has no older daughters, she does all of the housework, and cares for the children herself. She starts the day by milking the cow, which stays in the earthen stall adjacent to the main room. She brings the milk into the courtyard, and there she fixes her husband and children a breakfast of coffee with milk, bread, and olive oil. When everyone has awakened from the smell of the coffee, and the noise she is making, Zohra serves them on a low table in the room.

After the family has eaten, she cleans up the leftovers, eating as she does so. Her husband leaves to go to work in the field, while she dresses the younger children. Her second and third oldest children, a boy (age 11) and a girl (age 9), go to school. Her oldest, the fifteen year-old son, no longer goes, because he couldn't pass his fifth grade examination. The three youngest are not old enough for school, but Zohra plans to send them when they are. She sends the two off for the day, and the other four remain at home with her.

Next, Zohra goes to the haystack by the house, takes an armful of hay, and deposits it in the stall for the cow and donkey, along with a bucket of water. She collects the eggs laid by the chickens that morning, but doesn't feed them. They can fend for themselves.
The big clay water jugs are nearly empty by now, so Zohra prepares the donkey to go to the well with her. She brings the animal into the courtyard, and throws the heavy, thatched baskets over his back so that one basket hangs down on each side of him. She carries the two awkward containers over to the donkey, lifts them up, and positions them into the baskets. With a stick in one hand, a rope attached to the donkey's neck in the other, a baby on her chest, and three children trailing behind her, she sets off for the half-mile walk to the well.

At the well, the donkey is feisty, and Zohra has her son hold the rope, while she lifts the water out of the well with a bucket and pours it into the jars. Fortunately, most of the wells in Douar have engines, housed in little mud huts, that pump the water up and out into the trough. When both of the water containers are full, Zohra, her children, and the donkey walk back to the house and unload their burden.

Zohra feels hot and tired from the walk, and her feet- always bare and calloused- hurt. To soothe herself she takes the small clay pot with holes in the sides (called a canoon), some tea, sugar, and a teapot into the dark and relatively cooler earthen room. She adds a handful of coal, along with some fuel, to the canoon, lights it, and puts the teapot of water directly on the coals. When the water boils, she stirs in a couple of tablespoons full of tea, lets the tea boil for several minutes, adds sugar, reboils the mixture, then pours herself a tiny glass of the strong, sweet brew. She sips it slowly, savoring the taste and feeling slightly more energetic. She remembers that the family bread supply was low this morning, and decides she must make more. She knows she should
also wash the family's clothes, but decides to leave that chore for tomorrow.

Like all Douaran homes, Zohra's courtyard contains a clay oven in the corner. The oven, called a tabouna, resembles a 3-foot-high igloo, except that the top is open. Coal is burned in the bottom to heat the tabouna, and a hole in the side empties ashes out onto the ground, and is used to regulate the temperature by adding and stirring the coals through it.

Zohra prepares the tabouna, then makes a firm dough from the wheat she and her husband harvested. She rolls the pieces of dough into thick round pancakes, about 7 inches in diameter. By now, the tabouna is sufficiently hot, so one by one, Zohra takes a "loaf" of dough, and putting her hand into the oven, slaps the round bread up against the insides of the scorching oven. Sweating, she continues to put her hands into the tabouna, to feel if the bread is done, to pull it off and out of the oven when it is, and to add more of the loaves. Zohra tolerates the heat on her hands and face out of habit and necessity- a task that would make others shrink away in pain.

Baking the bread takes Zohra a couple of hours. When all of the loaves are removed and cooling, she feels the need to urinate. She walks a hundred feet from her house, to some tall cactus, and relieves herself. (There are no toilets in Douar.) She returns to the house, and pours some cool water from the jug into the plastic bowl, splashing it on her face, arms, and feet. (The plastic bowl is multi-purpose, and Zohra uses it to hand-bathe herself, to bathe the children, to wash the cooking utensils, and to hold foodstuffs when she is cooking.) Before Zohra can
think about another cup of tea, her husband walks into the courtyard, expecting his lunch.

In a pot on the canoon, Zohra prepares chakchouka, a piquante red sauce of tomatoes, onions, hot peppers, and olive oil. When the sauce is ready, she pours it into a wide pottery bowl and places it on the table, along with two round loaves of bread, in front of her husband. She also gives him a small pottery jug full of well water.

When her husband has eaten, he goes to bed and immediately falls asleep. The children, including those home for lunch from school, eat from the same bowl of sauce, and drink from the water jug. The two return to school, and the rest, like their father, sleep. Zohra feeds her baby again, puts him down to sleep with the others, then eats too. As is customary, Zohra, like most Tunisians, eats with her right hand, not her left, for the latter is used to wash herself. Zohra deftly scoops up the sauce in a morsel of bread and puts it in her mouth. She was hungry after her long morning of work, and the food satisfies her.

After eating, Zohra cleans the pot and dish in the plastic bowl of water and some detergent, and stores them all in the French wardrobe (cupboard) she brought to this house as part of her dowry. It's one of the few items left from her wedding, and besides the low round metal table, the only piece of furniture she has ever owned.

Zohra is tired, so she lays down on the bed and instantly goes into a deep sleep, despite the noon heat and huge flies buzzing around her. She awakens, an hour later, to the whimpering of her baby, who has diarrhea. Zohra gets up, picks him up off the rug, and puts him onto the dirt floor. She cleans the mess he has made, then finds the plastic bowl,
fills it with water, and bathes him in it. He only wears a little shirt, so there aren't any clothes or diapers to wash. Zohra holds and cuddles her baby for awhile, stroking his uncircumcised penis to soothe him. (He won't be circumcised until he reaches the age of 5 or 6.) He tries to play with the tiny hairiss made of a miniature wood fish and hand pinned to his shirt, but he can't reach it. Zohra knows he is especially pretty, which is why she has pinned the charm on him. The fish and hand of Fatma (a hand-shaped charm) are good luck and protection from the evil eye (i.e., the jealous stares of neighbors or strangers).

Meanwhile, Zohra's husband and children awaken from their nap. Her husband wants a cup of tea, so she puts her baby on the floor again (his bottom is always bruised from the hard floor), fetches the canoon from the courtyard, and repeats the tea preparation she could do in her sleep out of habit. When the tea is cooked and poured, Zohra and her husband drink a glass each, and say a few words about going to the field this afternoon to harvest the wheat.

Zohra wouldn't mind working in the fields if she didn't have to do the housework too. In fact, she prefers working outdoors with her husband. But together, the household and field work are too much for her. Still, she knows she's lucky her husband works with her, because some of the women work in their fields alone.

When they have finished their tea, Zohra puts the canoon back into the courtyard and her husband brings the donkey out of the stall. The cow is already in the field, where the oldest son took it to graze earlier in the day. Zohra's husband loads the donkey with the baskets, and Zohra puts the baby in one basket, a full water jug in the
other. Her husband carries the scythes. They set off, leaving the other children at home with the older one in charge.

At 4:00 pm, the sun is still blistering. Zohra takes her baby out of the basket and fastens him onto her back within her darleila, completely covering his little body. Like her husband, but with a load on her back, Zohra takes a scythe in her right hand and cuts the wheat with the inner blade, gathering the stalks in her left hand. When she has a good bunch, she wraps some stalks around its center, forming a sheaf. Each time she makes a sheaf, she puts it in a pile with the others.

Before long, Zohra has a headache from the heat and work. She asks her husband if she can return to the house, and he agrees, knowing she must begin preparing the evening meal soon. Zohra walks the half-mile home, her head pounding, bare feet burning, her baby weighing heavily on her back. On her way, she stops for a minute to pick some wild caper leaves.

At home, Zohra takes the sleeping baby out of her darleila, and lays him on the bed. She removes her scarf, pastes the caper leaves on her sweaty forehead with some cool water, and replaces the scarf to hold the leaves in place. She expects the remedy to relieve her headache soon, and begins preparing a tea for herself.

Zohra sits for awhile (how long doesn't matter), sipping her tea in the dark house. But soon the children (including those home from school) find out she has returned, and come into the room to be with her. Although she loves them, it seems to Zohra that all they ever do is fight, cry, and bother her. Just then, her oldest boy pushes his younger brother, who falls and knocks over the teapot that was balanced carefully
on the canoon. Tea and coals spill out onto the floor. The oldest child screams in his own defense, the next one cries, and the baby does both.

Zohra's head is throbbing. As she reaches over to hit her sons, her husband walks in, sees the mess, and begins hitting the kids himself, screaming at them and Zohra. Out of the physical pain from her head, which is now worsening, fear of her husband, and pride that her neighbors should not hear her yelling, Zohra holds her rage inside, keeping silent as her husband shouts insults at her. The episode does not last long, but it seems like an eternity to her. At last, her husband storms out of the house, heading, no doubt, for the grocery store, where he spends most of his non-working hours, gambling for tea and cookies and talking for hours on end with the other men of Douar.

The children have suddenly vanished, and Zohra sits down on the rug next to her baby and cries with him. Her headache is almost incapacitating now. She goes to the wardrobe, and takes out a razor blade stored inside. She removes her scarf and the caper leaves, pulls her tangled hair back, and with the water in the plastic bowl, splashes her hands and forehead, and cleans the razor blade. Then she takes the blade between two fingers, raises it to her face, and makes several half-inch nicks in her forehead. As the blood flows from her head, so does her pain, and Zohra feels calmer. When the flow stops, she cleans her skin, replaces the leaves and scarf on her head, throws the bloody water into the courtyard, and stores the blade in the cupboard for another bad day. She feels tired, so with her baby next to her, she falls asleep on the bed.
Zohra wakes after an hour, and aware that her husband will be home soon, she begins to prepare dinner. The air is cooler now, so she heats the leftover chakchouka on the canoon in the courtyard. This time, she adds several eggs to the sauce, and lets them boil until they are cooked hard. The children are all around, playing and fighting as usual. She knows they're hungry, so as soon as the chakchouka is done, she serves them with one bowl and two loaves of bread.

Before long, Zohra's husband returns, says nothing to her, and sits on the floor by the table. The children finish eating hastily and go outside. Zohra also says nothing about their previous conflict, serving her husband in silence. As he eats, she fixes more tea. When he is done, Zohra serves him the tea, then helps herself to the chakchouka, bread, and afterwards, a tea. Her husband leaves again, for the rest of the evening, to smoke and play cards at the grocery store.

Zohra cleans up the dinner mess, then sits down on a rug in the courtyard with her baby, enjoying the coolness of the evening. Her muscles are sore, her feet burn, and her head still has a dull ache. She misses her mother. She cuddles her baby closer to her. One by one, her children fall asleep around her, in whatever position they happen to be in when fatigue hits them.

Zohra's husband returns from the grocery store. He is still quiet, but his mood seems to have lifted. He tells Zohra to come to bed with him, which, after half-carrying her sleeping children inside, she does.

The Women of Douar

Zohra's lifestyle and daily activities are typical of the women of Douar. However, each woman can certainly claim a uniqueness to her own
life, apparent in her personality, beliefs, and the details of her dress and house. The following brief sketches of each woman interviewed provide an idea of the individuality of the Douaran woman.

**Khadija.**

Khadija wears a western-style skirt and t-shirt, and like all women in Douar, a scarf on her head for modesty. She is thin, of medium height, with darkly tanned skin and one gold front tooth. She wears **kohl** (a fine black powder made by grinding a particular plant) to line and enhance her dark eyes. When speaking, she looks directly at the individual she is addressing, even when her responses are evasive. She appears to be 34 years old, but she is only 24.

Khadija has been married two years. She lives with her husband, and his parents and two sisters, all of whom she had never met prior to the marriage. Because her parents live in another area, she rarely visits them, and she has no friends in Douar. Although she sees other women when she looks outside the house, her social contacts are limited to her husband and his family. She is considered by others to belong to his family now, but she has never felt about them the way she feels about her own parents and siblings. She misses her own family very much.

Khadija and her family-in-law live in a house of one concrete room and two earthen rooms. The concrete room is the main room, where a rare guest is entertained, and the entire family eats, but Khadija calls it her room, because only she and her husband sleep there. The parents sleep in one of the earthen rooms, the sisters in the other. Earthen walls enclose the three adjacent rooms.
All of the housework is shared by the women—cooking, cleaning, feeding the animals, and making bread. And as Khadija's skin color shows, the women also work in the fields. They do not have to go out for water, however, because they have their own well, and there are no children to care for.

Despite the lesser workload without children, the lack of them is Khadija's biggest problem. She has never used a contraceptive, but she has not become pregnant during two years of marriage. Naturally, Khadija assumed at first that something was wrong with her, so she decided to try a traditional medication. She made a mixture of mahleb (dried flower leaves), khzama (another plant part), and butter, then soaked a cotton ball in the mixture to form a vaginal suppository. She used the suppository before sleeping with her husband. (Interestingly, the Arabic word ma'hal, of which mahleb is a related form, means sterility.)

Unfortunately, the treatment did not work, so Khadija decided to visit the male nurse in a nearby town.

The nurse examined Khadija and told her that nothing was wrong with her, and that her husband should come in to see him. Khadija's husband, a thin young man about 24 years old, has refused to go. Not that Khadija ever questioned him on such a sensitive subject, but through her mother-in-law, who talked to her father-in-law, Khadija's husband was made aware of the nurse's recommendation.

Khadija has thought about divorcing her husband, which she could do if he is physically unable to father children, but she isn't yet ready to take any action. For one thing, she doesn't feel confident enough, and her own family is not nearby to encourage her. But if Khadija does not
conceive within the next one or two years, she will most likely divorce her husband, because her marriage was based on the assumption that both spouses were capable of having children. And for Khadija, children are her only security for the future. But for now, Khadija will continue to work and live with her new family, and to hope that she will become pregnant, until she loses that hope and has to make a decision about her future.

Ribh.

Ribh is a blonde, sturdy-looking woman with strikingly beautiful eyes that turn down at the outer edges. She wears a filthy-darleila, open at the sides, and a scarf on her hair. She is nine months pregnant, but still working at home and in the fields as usual. Ribh believes she is over 40 years old, although she looks more like 35, and mathematically speaking, cannot possibly be over 36 (i.e., when her age of marriage, oldest child's age, and years of marriage are considered).

In addition to her child "on the way", Ribh has five sons and one daughter. She also had a baby son that died last year, at the age of one year. She feels sick, and gets a lump in her throat, every time she remembers him. He had diarrhea, so her husband had obtained a ride for the three of them with a truck driver passing through to a nearby town. At the hospital, the doctor insisted that the baby must be left with him, but Ribh refused to leave him. During the dusty, bumpy truck ride home, the baby died in her arms.

Ribh's ongoing problem is having too many children, although when she considers this question, she realizes that the real problem is having too many sons. When she was younger, she wished for sons, but now she knows
that older daughters are essential for a woman because they can help her with the housework and children. Sons only cause trouble, fighting with each other and the neighbors' children.

Ribh has never taken a contraceptive, but she wants to have "the operation" (be sterilized). She fights with her husband about this issue, as he wants her to have another daughter to help her with her work, or so he tells her. In reality, Ribh's husband fears contraceptives, for reasons he has never articulated, but which relate vaguely to his own sense of masculinity and his wife's health (i.e., regarding the latter, that a contraceptive would hurt her). Still, last month, when she was taken to the hospital for pregnancy pains, Ribh had practically convinced him to let her be sterilized in the hospital when she returns there to have her baby.

(Postscript: Three weeks after the interview, Ribh had her baby at home— a boy. She did not go to the hospital as she had planned, and thus was not sterilized. And she could no longer argue with her husband that this child would be a girl so that she could stop having children.)

Hafsia.

Hafsia is 36 years old, petite, has black hair, small features, and tanned skin. She has squinted against the sun for so long that her eyes remain that way, even inside the dark house. Hafsia wears the darleila and scarf on head. She has had five sons and three daughters during her 22 years of marriage, including her 9-month-old son whom she is presently nursing.

Hafsia grew up in a Bedouin settlement on the outskirts of Tunis, in an area no less poor than Douar, and following her marriage at the age of
14, she moved to her new husband's home. Thus, although she has never
lived without poverty, she knows that some people live better lives than
she and her neighbors live, which depresses her when she thinks about
it. Her greatest hope is that she and her husband will build a concrete
house in Douar- one with clean concrete floors, and a roof that doesn't
leak during the winter rains. She no longer clings to the belief that
her children will succeed in their studies. Her two oldest sons- the
only ones who have been to school- were expelled several years ago. The
oldest was hit by a combine, and nearly died. He missed several weeks of
school, and because there were no provisions for making up lost
schoolwork, he was unable to return. Her other son took the sixth grade
examination three times, but couldn't pass, and was thus expelled.
Hafsia never thought about sending her girls to school.

Hafsia's children are her greatest joy and greatest pain. She is
proud of them, and informs any new person that her children will not
bother them because they are "well-educated" (education referring to
their upbringing). She seems unaware that her belief is contradicted by
their constant disobedience of her commands to leave her alone, as they
laugh, peek in windows, and push open the closed door. However, they
obviously want to be near her.

When her oldest son was hit by the combine, Hafsia became sick with
anger and grief. It was winter then, but she didn't feel the cold, and
she hit her head on the rocks outside, out of grief. Ever since, when
she feels angry, she becomes ill, because as she puts it, she "cannot
bear being angry". Because the man driving the combine was her husband's
friend, there was nothing they could do.
Hafsia's children fight among themselves and with the neighbors' children, but she considers only the latter fighting a big problem, one which occurs about once a year. Because her two older daughters help her care for the younger ones, and do the housework, Hafsia does not feel overworked. But she does feel bored by her life, and lonely, and she wishes she could stop having children.

Salha.

Salha is approximately 40 years old, and the wife of one of the grocers in Douar. She is short, stocky, and has protruding teeth, a hooked nose, and small eyes. She wears a darleila and scarf. But what Salha lacks in appearance, she makes up for in hospitality and good humor.

Her earthen house looks just like the others, but Salha has a definite advantage in her husband's social status. Because her husband sells groceries, she always has enough food, and can even offer rare guests a Fanta soft drink. They have a television that runs on batteries. Everyone owes her husband money, and he considers himself a businessman. His self-esteem is apparent when he converses with strangers, and Salha shares some of this confidence. Still, the job does have its disadvantages, as Salha worries about her husband when he has to leave Douar to buy supplies for the store.

Salha has had seven children, plus one abortion when her pregnancy was intolerable. One of her children died 10 years ago at the age of two. All of her school-age children, except for her oldest, go to school, and she plans to send the younger ones when they are old enough. Her oldest, a girl aged 20, was past the age when the school was built, so she has never gone.
A particularly disturbing incident occurred in Salha's life last year. She had left her youngest children with her mother-in-law and the latter's daughter (i.e. Salha's husband's sister), while Salha went to visit a friend. The 19-year-old girl was supposed to watch the children at Salha's house, but instead, she started a fire in the haystack next to the house, left the children there, and went home. The entire haystack (worth about 300 dinars; one Tunisian dinar equals approximately one American dollar) burned to the ground. The fire truck from another town came too late, and the police after them, but the girl was "pardoned" and nothing was done.

Salha claims that there were witnesses who saw the girl start the fire, but because the authorities let her go, nothing can be done. Despite the girl being her husband's sister, the two families have not spoken to each other since the incident. Salha believes the girl wanted to kill her children too. There were no prior conflicts between the families, or involving this girl and other people, so Salha has concluded that the girl must be "crazy".

Salha is concerned about the evil eye, for herself, as well as for her baby. To protect herself, she wears a hairiss pinned to her darleila, over her right breast. The hairiss consists of two round fish bones, two miniature wooden and silver hands, two tiny shells (all for good luck), a blue bead ("it's just a bead"), a long black gazelle's tooth, and a tiny plastic bag with colored threads and cumin in it. When she pins the hairiss to her baby's shirt, it protects him too. Salha has reason to be concerned for herself because of her husband's social
position, which makes others jealous of her, and for her baby, because he is blond and pretty.

In general, Salha is not a nervous person, but she does feel badly about the living conditions in Douar, which she calls "below zero". However, she is not lonely or sad. She explains her hope for the future saying that she is "waiting for the goodness of the governor and of God".

Hlima.

Hlima is a petite woman with straight dark hair, gentle eyes, and small features. She wears a dark red darleila and scarf, and kohl on her eyes. She has had seven children, but two died before the age of one year. She now has five living children. The oldest is nine years old, the rest are under seven. Hlima has chronic headaches, at least one per week, for which she bleeds herself. She blames her headaches on her anger over continual pregnancies and her husband's refusal to let her use a contraceptive. She has had all of her babies at home.

Hlima is 25 years old. She was married approximately 12 years ago, before she started menstruating, and her first child was born a year or two later. He lived only eight days. Since then, she has either been pregnant or nursing. Presently, she is nursing her one-year-old son.

Hlima's physical weakness is offset by her strong character. She speaks straightforwardly and confidently. She is kind to a stranger, and to her children. The first problem she thinks of occurred today, when a man scorned her cousin because the latter has an amputated arm. Hlima felt terrible, and angry, and considered this cruelty a "big problem". But she kept silent because there was nothing she could do.
All of her daily problems concern her children, that is, the work they create for her, her desire to stop having more, and her husband's refusal to let her stop. She and her husband don't quarrel anymore, he just yells at her and she keeps silent. When he leaves, she cries, and goes to visit her mother. She says that talking with her mother "relieves my heart".

Hlima feels trapped, and bored with her life. When her cousin's husband buys her cousin something new, Hlima feels worthless (because her husband doesn't buy her anything special). Sometimes she feels so tired and angry that she thinks something is wrong with her mind, and she wants to die. But Hlima is not hopeless. She changes her mind about dying when she thinks of her children, who are too young to be without her. She hopes that one day they will graduate from school, and improve the situation they live in now. When the younger ones are old enough, she is going to send them all to school.

Fouzia.

Fouzia is a plump, tan and energetic 26-year-old woman. She has a round face, bright eyes, and a quick smile, and she is always ready for a good laugh. She never sits still for more than 15 minutes, waiting on her guests or her husband, caring for her one-year-old son, or simply getting up to do whatever she is thinking of at the moment. She is concerned with her "image", and only wears western-style dresses that are two sizes too small for her. She is one of the few Douaran women who attended school: she went up to the fifth grade in elementary school.

Fouzia married her cousin five years ago. Although he is fellah, he has the prestige of having obtained a baccalaureate (high school
diploma). Fouzia and her husband and two of their three children live with her husband's father in a three-room concrete house, with a dirt courtyard. Two of the rooms have wood-frame beds, and one also contains a wardrobe, a radio, and a battery-operated television.

Fouzia does not work in the fields, as she strives to be "like the wives of other educated men". She considers her housework to be a big problem. Although she has only three children, she gave one to her mother to raise, in order to decrease her own workload. She also talked with her husband about hiring a woman to help her, and he agreed but told her that she must find the woman herself. She hasn't hired anyone though, because if she hired a Douaran woman (those are the only ones she knows), people would think she is trying to be "superior" to them. And Fouzia does not want to appear haughty to the people with whom she has been raised. So, she has given up this idea, and is doing the work herself. To conserve her energy, she does the most difficult work at night, when it's cooler, and saves the easier tasks for the day.

Fouzia is also intent on not having any more children. She is afraid of contraceptives, i.e. that they would harm her, and she has never discussed the question with her husband. Rather, she observes the Calendar, and during the times she thinks she is most fertile, she makes her husband ejaculate outside of her. She says her husband "understands". Her family also agrees that she should stop having children.

Her five-year-old daughter gives her constant problems, either hitting the neighbors' kids, or saying bad things to old people. Her behavior creates conflicts between Fouzia and her neighbors, and Fouzia
resorts to beating the girl when talking to her doesn't work. Her husband also gets mad at Fouzia when he thinks Fouzia is not caring for her properly. Once he saw his daughter near the well by herself, and was furious with Fouzia for allowing her to wander off. Fouzia explained to him that she is overworked and tired, but he continued to yell at her.

Fouzia says she has no friends, and she doesn't go to her parents' house when she has a problem. She simply "endures the problem" and feels lonely, because she has no brothers to defend and look out for her. Although she has no serious illnesses, she becomes sick when her daughter makes trouble for her.

**Mahbouba.**

Mahbouba doesn't know how old she is. She does know that she has been married for 20 years, and that her oldest child is 18—approximately, of course. But the exact number of years doesn't matter—she has seven living children who make her feel old. Counting her husband, there are nine of them living in a one-room earthen house, although the only time they're all inside together is at night and during the rains.

Mahbouba wears a darleila held together with two safety pins, and a pink scarf on her head that she ties under her chin. She has a sharp nose and protruding teeth, and her eyes are glazed over by cataracts. She has blurry vision from the cataracts, which causes her to lean forward and look directly into the eyes of the person to whom she is speaking. She has never been to a doctor in her life, and she cannot go now, because her husband won't take her to get the medical card she needs for free medical care.
Mahbouba does not work in the fields, and she does not feel overworked at home because she has an older daughter who helps her. But Mahbouba is sick of having children. She remembers when she was first married, she couldn't become pregnant. Then, after a year, she conceived, and bore a dead child. The next year, she had another a dead child. Mahbouba decided to seek help from the marabout.

A marabout is a dead saint, whose burial site is made into a shrine. (The site is also referred to as a marabout.) People visit the site to burn candles or incense, drink the water if there is a well, leave a sheep for the poor, and/or pray. On the outskirts of the closest city, which is 27 kilometers away, a plot of land is marked by numerous marabouts, and one of these is the tomb of Sidi Hamid. The people of Douar are distantly related to this marabout, and make the trip by camel or donkey once a year.

A daughter of Sidi Hamid lived in Douar up until her death last year, and was considered "blessed" by virtue of having been the saint's child. Her name was Lele Mabrouka (Sidi and Lele are terms of respect similar to "Sir" and "Aunt".) When Lele Mabrouka was living, Mahbouba went to see her, to receive help in having children. Mabrouka told her to kill a sheep and give it to the poor to eat. Mahbouba obeyed, and subsequently had a healthy child (now her 18-year-old daughter). Every year after that, Mahbouba returned to Lele Mabrouka with her child and a sheep. Although her fourth child was also born dead, Mahbouba kept giving the sheep, and after four more years, had another healthy child. Four years after that birth, she began having children every year, so that she now
has five children who are six years old and younger. Mahbouba now visits the tomb of Lele Mabrouka every year.

Although both of their families agree that Mahbouba should stop having children, Mahbouba's husband wants more sons, and refuses to allow her to go to a doctor for a contraceptive. She has felt furious with him since her second youngest was born. When they fight, she yells back at him, too angry to care what the neighbors think. Since the 7th of Ramadan (the month of religious fasting) approximately two months ago, she has "forced" him to sleep outside in the courtyard. She says she is waiting for her period, because she has to be having it when she goes to the doctor for a contraceptive, although even when she does have it, she has no way to go without her husband's permission and help.

Mahbouba is sad, lonely, and when angry, she wants to die. She has every ache and pain one can think of. To cope with her anger and frustration, she bleeds herself, beats her thighs, screams, and yells at her husband and her children. Sometimes she has to tie the children up to keep them still. When she cannot stay in her house, she goes to her brother's house and talks to his wife, who is her best friend. If her anger is very strong, this visit helps a little, but Mahbouba still returns home feeling trapped, worthless, and bored with her life. She sums up her feelings of hopelessness: "Life is going backwards, not forwards."

Saadia.

Saadia is near 30 years old, has four sons and one 5-month-old daughter. Her husband is her cousin. He has no fields of his own, so he works as a shepherd. They have been married for 10 years.
Saadia looks distinctively different from the other women of Douar. Her face is wider and flatter than the others', she has broad, high cheekbones, a wide mouth, and eyes that turn down at the sides. She resembles an American Indian.

Her dress is also remarkable, prompting one to wonder whether her looks have made her feel differently and thus dress differently. She wears a brilliant blue darleila (in contrast to the others' dull colors), a pink-flowered scarf, a bead necklace, one silver pin to hold the right side of the darleila, and a green piece of yarn to hold the left side. Huge earrings (about 4 inches in diameter) hang from her ears, supported by a string tied to each, and looped over her head and under her scarf. A tiny hairiss of pepper seeds and the schub (Quranic writings), along with two tiny shells, and a berry tree branch, are pinned to her darleila. To say the least, Saadia is colorful.

Only one of Saadia's children is in school—her oldest. The second oldest was in school too, but last year, in the second grade, he suddenly stopped going. Saadia was so upset by this that she went to see the derwish three times.

The derwish is a local healer, a "medicine man". He grew up in Douar, and lives in an earthen house with his wife and children, like everyone else in the settlement. But, unlike the others, he tells people what to do when they are ill, that is, he "opens the book on them". Whether or not he has a book is of no importance to those who seek help. They only know that they have a family member, or heard of someone, who was healed by him. Still, many people do not believe in him, and often the derwish himself will tell an afflicted person that his or her illness
is a doctor's problem, not a derwish problem, and send the individual on to the doctor.

But Saadia has been helped by the derwish. She used to suffer from chronic faintness, until the derwish gave her the hairiss to wear. Ever since, she has not had the sickness, and she doesn't remove the hairiss from her dress.

Thus, Saadia decided to visit the derwish for her son's refusal to attend school. The derwish opened the book on her, wrote something on a paper, and instructed her to burn incense, hang the paper in the incense smoke, then pin it on her son's clothing. Saadia did all of this, but her son has still refused to go to school. She has concluded that "God is the Helper" - not the derwish. But she still wears her hairiss to keep from fainting.

Saadia has had difficulty with her many pregnancies. Just prior to her most recent pregnancy, she was "shocked" by a dog, and miscarried a three-month-old fetus. She didn't mourn though - women in Douar don't mourn for miscarriages or abortions.

During her last pregnancy, she craved fuel oil, coal, and sauteed onions. Everytime she made a meal for her family (which always included onions), she would drink some fuel and eat a bite of the coal she uses to cook with. This craving did not strike Saadia as particularly unusual - she knows other women who eat coal, clay, or soap when they are pregnant. But since her baby was born, Saadia has realized that eating these things was not good for him. He is skinny and yellow, and has diarrhea constantly. But he is surprisingly cheerful, considering his beginnings.
Saadia plans to go for a contraceptive when she starts menstruating again, because her husband has agreed. She hasn't had a period since before her pregnancy, and like all women in Douar, she firmly believes she cannot conceive as long as she is nursing. (She does not calculate the fact that many children within one family, including her own, are less than two years apart in age, although babies are nursed for two or more years.)

Saadia has never taken a contraceptive, but she does know about one traditional method. When a woman wants to stop having children, she should take a thick thread (from the loom), soak it in her menstrual blood, tie the thread in a knot, then store it somewhere in the room where she sleeps. This will prevent her from becoming pregnant. If she changes her mind, all she has to do is take the thread out and untie it. But Saadia has never tried this method, so she's not sure if it works or not.

Saadia has had two recent deaths in her family. Five years ago, her brother "went crazy" and died. Then last year, at the age of 16, her sister started hemorrhaging from the nose and died. The doctor said her illness was cancer. For both, Saadia screamed, cried, beat her thighs with her arms until all were bruised, and scraped her face until it bled. She still has the scars on her face.

Saadia has another younger sister who is deaf and mute. The girl, now 16 years old, was born normal. They know she could hear then, because she responded to voices. But that was when their parents were still living in the tents. One day, it began to pour rain and the women ran outside to secure the tent, leaving the baby alone inside. When they
returned, the baby was having a convulsion. The women were terrified, so they put perfume all over her body, and tried several other ways to calm the infant. Saadia thinks that whatever they did— not the convulsions—made the girl deaf. The girl has never had a seizure since. Now, she and Saadia communicate with gestures and looks. Saadia's sister has a sweet demeanor, smiling whenever anyone looks at her, and appears to be of normal intelligence; (she helped Saadia fix the radio by removing the fourth battery, turning it around, and replacing it, all on her own.)

Saadia has many physical problems, and she feels anxious and depressed most of the time. She fears God's punishment, of course, and sometimes she talks aloud to herself. But she is definitely not without hope for the future. Her oldest son is still in school, she plans to convince her other son to return, and she will send all of the rest of her children when they are old enough. If God will help her, their lives will improve.

Torkia.

As an old photograph shows, and her daughters' beauty suggests, Torkia was once a handsome woman. She had soft features, large eyes, brown hair, and straight white teeth. Now, at the age of 30, her hair is still brown, and her teeth are still white, but her face is permanently disfigured from a terrible childbirth she experienced 10 years ago. During the excruciating labor of her son's birth, Torkia's face was twisted in pain, and has never healed. The entire left side of her face is pulled to the right. Her left cheek is swollen and lumpy. Her left eyeball protrudes and rolls uncontrollably when she moves her normal right eye. The left eye is not blind—she can see, even when it rolls—
but the strain on her right eye makes the latter perpetually bloodshot. Her mouth is forced up high on the right side making smiling very difficult, and laughing impossible. She expresses her amusement with a chuckling sound in her throat and a slight upward twitch of her lips.

Torkia's husband is chronically unemployed. Although his uncle gave them a small piece of land on which they grow wheat, the area is not large enough to cultivate more than they need for themselves (i.e. to sell). Sometimes Torkia's family gives them a little money, but when they can't, her husband leaves Douar to look for work. If he finds a job, he stays in the place and sends them money. Torkia hates for her husband to leave, but when he's at home and unemployed, they quarrel constantly.

Torkia works at home and in their field. Her oldest child- a boy- is 11 years old, and he and her only two girls go to school. The two younger boys will go when they are old enough. But meanwhile, Torkia has to care for them all herself. Sometimes when he is home, her husband helps her by carrying water from the well (which must be done three times each day), and by bringing wood to the house for cooking. But when he is gone, Torkia always has bruises on her back from carrying the wood.

Torkia cares for her husband. When they fight, she keeps silent until he stops yelling. He never insults or beats her. When he has calmed down, she tells him what she thinks. If she can't control her anger, she goes to her parents' house and discusses the problem with them, or turns the radio on and talks to it. Sometimes she stops eating, or sleeps alone, until he apologizes, which he always does.
For her problem of feeling overworked, Torkia has taken direct action. With her husband's approval, she went to the doctor three years ago and obtained an IUD. It gives her pains in her back, but she is glad she has stopped having children.

Torkia hates her poverty, but she does not feel unworthy. She still likes to wear something new, and she keeps her teeth white with sweck leaves and brushing. She picks the sweck leaves from the sweck tree, and rubs them on her gums and teeth for about a minute, two to three times each week. The leaves turn her gums an orangish-brown color and make her teeth whiter. She brushes her teeth with a beaten piece of alfalfa and soap once every ten days. On the rare occasion that someone wants to take her picture, Torkia removes her scarf to show her beautiful brown hair. Once she went the doctor, to see if he could heal her face, but he told her she would have to go to a doctor in Tunis. She has never had the money to go to Tunis, and probably never will.

Sada.

Sada is a petite, pretty, 27-year-old woman. She has widely-set eyes, white teeth, and she smiles frequently. Her skin is fairer than most, and as such is blotchy from burning and peeling. She wears a western-style shirt, and a skirt that is too small, ripped open on the side, and held together by a safety pin. She also wears a scarf.

Sada lives with her husband, three sons, and one daughter in an earthen house. All of her children are under six years old. Her husband is her cousin, and fellah. Sada works with him in the fields, planting peppers, pomegranates, corn, and watermelon, in addition to her work at home. She rarely becomes angry with her husband, but she does get upset
with her children when they fight, which is at least once a day. When she can no longer tolerate their behavior, she beats them on their fingers and the soles of their feet, then ties up their legs until they calm down. This usually relieves her, and quiets them, for awhile.

Sada feels torn between her housework and the fieldwork, because no one helps her with the former. To cope with this problem, she divides her housework into parts, and tells herself that she'll do "this part" before going to the field, "this part" after, and the last part she'll save for the cooler evening, or tomorrow. This approach makes her feel better, but it doesn't reduce her workload.

Sada used to have fevers every time she was pregnant, and she ate coal to satisfy her cravings. With her husband's permission, she has been using an IUD for the last year, because she does not want to have more children. Now, she has "uterine and genital pain" from the IUD, but she accepts the problem because it is not as painful as being pregnant. She also has headaches, for which she uses traditional remedies, including pouring olive oil on her head, and bleeding herself.

Ten months ago, right after Sada's son was born, her sister gave birth to a son who died immediately. Sada was so upset by this terrible omen that she beat her thighs and scraped her face. Her sister came to her and bled Sada's forehead for her, then put the hot intestines of a "just-killed" rabbit on Sada's head, eyes, and teeth (i.e. where the pain was). When the intestines turned blue, they were supposed to have absorbed all the pain. Unfortunately, the cure didn't work.

Sada had better success with the derwish. He told her that her headaches were due to the evil eye, because she was pregnant with boys
all the time. (Having many sons is an enviable position.) He gave her a paper with writing on it, which she held in the incense smoke, then pinned on herself as a hairiss. The treatment helped for awhile, as did some medicine she obtained from a doctor, but she still has headaches when she is very tired or angry.

Mbarka

Mbarka appears to be in her late twenties. She has soft round facial features with heavy black eyebrows that make her eyes look bigger and darker than they are. She is very brown from the sun. Her blue darleila is torn and dirty, held in place with two pink pieces of material (no safety pins, let alone the traditional silver pins). She also wears a blue scarf on her long, thick black hair. In contrast to her features, Mbarka has a deep, booming voice which she uses to yell at her children, or to make a point.

She has been married for 15 years (her oldest child, a girl, is 15), and she says she was married to her cousin at the age of "15 or 19". Whatever her age was, her marriage was one year after her first period. She has had children ever since— a healthy girl, a boy who died at seven weeks, two more boys who both died at one week, and three more girls and two more boys who are living. She is pregnant now, and she hopes that this birth will not be as painful as the last. She has never used a contraceptive, and her husband refuses to consider the possibility.

One day, during her last pregnancy, when she was harvesting wheat at midday, she became ill with vomiting and a headache. She went to the derwish, who told her the illness was due to the jinn (evil spirits). He gave her black cumin, green cumin, and harm (part of a local bush), and
told her to spread a mixture of the substances all over her body. She did this, but it didn't help her pain, so he told her to go to the doctor. Her husband took her to the doctor, who gave her medicine. When she returned home, she went into labor and had the baby. But her headaches continued. She returned to the doctor, who sent her (with her husband, of course) to another doctor in Tunis, but all they did was tell her that her pains were due to "post-partum fatigue" and "weakness of the nerves". She still has her headaches, especially when she is angry at her husband.

Mbarka's husband plays cards and drinks wine. She complains about his behavior sometimes, because he spends the little bit of money they have, when she doesn't have even a bed or a cupboard. When she is very upset, her protest used to be to go to her parents' house, but she can no longer go there because she has too many children. Now, depending on the situation, she stops eating, sleeps alone, or keeps silent, until he apologizes. She also visits her neighbor friend when she's angry, but that doesn't help, because she always concludes that she must return home and simply endure the problem.

Djamila.

Djamila is 27 years old, has five sons and two daughters, and is married to the other grocer in Douar. She attended elementary school for five years, and says she learned how to read Arabic, but she has forgotten how to write. She is an alert, physically strong woman, with a round face and bright, widely-set eyes. She wears a t-shirt, skirt, and scarf, and chews gum.
Her courtyard and house are concrete, and the latter is filled on one side with big bags of wheat. The room is tidy and clean, an accomplishment made easier by the whitewashed concrete. Djamila is proud of her house, and likes to have guests. She is also concerned about their opinions of her.

With seven children, Djamila's work is overwhelming. In addition, her two-year-old son broke his leg three months ago, which only increased her load. She used the IUD for one-and-a-half years, but had to remove it because of back pains and excessive bleeding. She became pregnant immediately, with her son, who is now seven months old. Because she knows that she gets pregnant six months after each birth, she plans to see the doctor for another contraceptive when she has her next period.

Djamila used to have headaches, but a doctor in Tunis gave her medicine that helped. She hasn't had a headache in over a year now. When she gets a cold, she uses neffa (snuff) to make herself sneeze. Occasionally, she feels bored with her life, but because her husband has an income, and she knows she lives better than many other people, she feels hopeful. She looks forward to the success of her children in school- the son and daughter who are presently attending, and the younger ones she plans to send. In her words, "There is no secure future without going to school".

Aicha.

Aicha is a big woman, relatively tall with large bones. Her face is soft and round, and she always looks tired. She is 25 years old, has been married for seven years, and has had six children (one died). She is nursing her youngest.
Even in Douar, poverty has its relative levels. Three telltale signs of greater poverty and the consequent lower status are: 1) no wardrobe in the earthen house; 2) noisy neighbor children around constantly (because they don't "respect" that house); and 3) no silver or safety pins on one's darleila. Aicha not only has no wardrobe, she doesn't have rugs or pillows to sit on. When a guest comes to her house, she sends a child to borrow a rug from the neighbor. Noisy children are always bothering her, fighting among themselves and with her children. Finally, Aicha's darleila is so old that it looks like a torn piece of cloth, pinned together with two pieces of string.

Aicha's baby has red sores all over his body. He screams when she bathes him in a bowl of cool water, but her breast always quiets him. In spite of his skin, he is plump and alert, as is the next oldest baby of almost two years. Aicha has been to see the medical midwife about a contraceptive, but was told to return when she's menstruating.

Aicha's husband is a thin, weak-looking young man, who is chronically unemployed. He spends his days and evenings at the grocery store, returning home to eat, sleep, have sex, and to release his frustrations on his wife and children. When he beats them, Aicha goes to see her parents and brothers. They tell her she's right, and talk to her husband, but his behavior doesn't change. That is, his behavior didn't change until Aicha took direct action. With the help of her brothers, she went to the court and told a judge about her husband's treatment of her. The judge ordered her husband to support her financially, so her husband obtained a house loan from the government, and started building her a one-room concrete house next to their earthen one. They also have
a bull, which they plan to sell in order to buy a wardrobe, bed, and table. The new house is nearly finished now, and a little of Aicha's hope for the future has returned, as she anticipates living in her new home.

Monjia.

Monjia is a handsome, 38-year-old woman whose facial features resemble those of a black African woman more than those of an Arab. She is also an educated woman: she attended six years of elementary school and still remembers the word Bonjour (French for "Good day"). Her face is bright with pride in herself, her daughters, and her tidy earthen home. She is cheerful, friendly, and likes to talk about her life. She can think about abstract ideas, and without suggestion, discusses poverty as her own personal problem, and the main problem in Douar.

Monjia's husband is a laborer, which means that he works for others whenever a job is available. He also has some land which he rents out. Monjia's daughters do the housework, so that she can work for other people. She works in their fields, and weaves and sells rugs to bring in dinar. She does not feel overworked, but she is always weary of not having enough money. She wants to organize her life, buy new animals, and to come out of their poverty, but her husband doesn't accept any of this. He spends most of the money he receives on alcohol. At one time, she considered divorcing him, and solicited the mayor's help. But when she realized she would have to give her children to her husband (because he has a better income), she decided to sacrifice her own life for her daughters. She knows that girls need their mother more than boys do, and if she had had only sons, she would have left them.
Five years ago, Monjia thought things were going to change after all. Her husband's cousin, who had worked in Europe, gave her husband 700 dinars as a gift to start his own grocery store. Monjia was thrilled—this was an opportunity she had never dared to hope for. Within two months, her husband had spent the entire amount on drinking. Monjia was so angry that she had an "attack of nerves". It began with trembling, and her heart beating so fast that she thought she would die. Her blood pressure rose (the doctor told her later), and her left foot went cold. She stopped eating and drinking. She felt frozen, and did nothing for days but stare into space, not feeling pain or anything else. She was taken to the hospital, where she stayed for 15 days. Since then, she has "given up" on changing her husband. When he yells, she keeps silent, and they always sleep apart.

Monjia is hopeless about her future. As she puts it, "I feel this way always, now, because I've never succeeded in anything—not school, not marriage,.... and even all my daughters have not gone to school." (Her children had to leave school because they couldn't afford the required supplies.) Still, she has managed to maintain her self-respect: she refers to herself as an intelligent woman. And in contrast to most other women, Monjia says she doesn't feel ashamed because "I've never done anything to be ashamed of."

To comfort herself, Monjia makes up poetry in her head. One poem she invented (she can't write) is about her daughter. To understand the sense, one must comprehend the meaning of the phrase Mektub, or, "It is written". Mektub is a powerful belief and explanation that whatever happens was meant to be, i.e. that it could never have been prevented or
changed, so one must simply accept things the way they are. Any attempt to change what was preordained by God is considered useless, a waste of time and energy. Monjia's feelings are poignantly expressed in her poem (which rhymes in Arabic):

"My daughter, what made you come out of your generation?
It is written, on your forehead;
My daughter, what made you come out of your family?
It is written, on your head."

(Notice the pun on "It is written on your forehead", i.e. the answer is written on her forehead, and, the burden of Mektub is on her head.)

Finally, a poem she wrote to express her own feelings, goes:

"I cry when I'm alone,
and I extinguish the flames of my internal fire.
I laugh when I see my enemies,
fearing that they will rejoice in my pain."

Mabrouka.

Mabrouka is Monjia's best friend. She is 33 years old, has two daughters and four sons, and lives with her husband, children, and father-in-law in the latter's concrete house. Mabrouka also attended elementary school, one year behind Monjia, up to the fifth grade. The experience shows in her bright, alert eyes, and her self-confident manner.

Mabrouka's problems include her husband's unemployment, too much work at home and in the field, her children's fights, and her family-in-law. She pushes her husband to work by talking to him, but in general it doesn't help. For her work, she does the most essential parts first, and puts the rest off for later. When her children make her so angry that
her "lungs feel swollen", she beats them and ties them up. Her third son is especially bad, and when he blasphemes against God, she rubs his lips and eyes with a hot pepper until he turns blue and faints. This remedy works, but "only for the moment".

Mabrouka has an ongoing conflict with her sister-in-law. Last summer, a snake bit Mabrouka, she was too ill to work, and her husband was unemployed, so her sister-in-law's husband loaned them 10 dinars. But before Mabrouka had recovered, her sister-in-law began to bother her for the money, insisting that Mabrouka pay them immediately. Mabrouka's husband sold some wheat to pay back the money, and since then Mabrouka has not spoken to the woman, out of anger at her lack of consideration.

When Mabrouka gets angry, she has headaches, dizziness, and nausea. She bleeds herself, uses caper leaves for her head, and drinks camel milk to calm her stomach. When she is very angry, she wants to die. Sometimes, when she is alone, and thinking about herself and her life, she thinks that something must be wrong with her mind. She blames herself for the way she lives, and when things are going badly, she feels worthless. She feels that sometimes "Life is smelling very bad." She clings to the hope that her sons will finish school and change her way of life.

Karia

Karia is a small village situated between large rolling hills and the Mediterranean Sea on the northeastern coast of Tunisia. A paved road off the highway goes directly into Karia, and ends there. Although the beach roads are gravel, those in the village proper are paved.
The population of Karia is approximately 7,400 consisting of 1,500 independent households, (Recensement General de la Population et de l'Habitat, 1984, Institut National de la Statistique). Approximately 64% of these households have "running water" (running water usually refers to one spigot sticking out of a wall in the courtyard); 9% have a private well, and 27% must go to a public fountain or spring to obtain water. Thus, the majority of families do not have to haul water.

The mean number of persons per household is 5, although 53% of all households have 5 or more persons. Approximately 79% of all homes have only one or two rooms, although 84% have electricity, 55% have a radio, and 36% have a television. Of the total village population, 30% are either actively or marginally employed. The literacy rate is 71%.

Karia is located in the middle of rolling hills used for farming and grazing sheep. A few miles from the hills are wide flat plains where watermelons and wheat are cultivated. The main occupation of the men of Karia is farming, but a substantial number are also fishermen. In a few rare situations, a woman may work with her husband or family selling fruits or vegetables, or more commonly, in the fields, but overall, the "average" village woman does not work outside her home. Some women embroider cloth, which is then sold by a family member, or by the woman herself to another woman who comes to see her.

Karia looks like other Tunisian villages- a labyrinth of houses connected by shared walls, and narrow streets through which little boys on donkeys can pass easily, but the occasional automobile has great difficulty maneuvering. A house is recognizable by its facade, which consists usually of a large, keyhole-shaped, wooden door set in a
whitewashed concrete wall. For a stranger, finding a particular house without help is nearly an impossibility.

The Village Woman

Maimouna was born and raised in Karia. She married her cousin 12 years ago, when she was 16, and they now have four children. They live as a nuclear family in a typical village dwelling.

Maimouna's house consists of two adjacent, whitewashed, concrete rooms, which, along with two concrete walls, form a small (10 feet square) courtyard. All of the floors in the rooms and in the courtyard are concrete. The front door opens into a narrow dirt corridor running down to a path that leads out into the street. There are no windows facing outside, only one window in each room that faces into the courtyard. Three of the house's outer walls are also the walls of connected houses. From the air, the village looks like a huge white maze.

The main room is approximately 10 ft. x 15 ft., and painted a cool aqua blue color. It has a high ceiling (also for coolness), and a door and window that open into the courtyard. The inside floor is covered with brightly-colored hand-made rugs, and the lower half of the walls are lined with mats. A wooden wardrobe in one corner holds all of the family's papers and valuable items. A wood-frame bed takes up the other side of the room. In the middle stands a low round table around which people sit on the rugs and pillows to eat.

The other room contains an embroidery frame with Maimouna's current project stretched across it, and a large bed in which all of the children sleep. There are no rugs or furniture in this room.
In addition to the two rooms, there is a pantry on another side of the courtyard. The pantry contains food stored in huge pottery jars, a tabouna for baking bread, and two gas burners for cooking sauce. Next to the pantry is a toilet room the size of a closet. The toilet consists of a hole carved in the concrete floor, which runs through a pipe out of the house.

Because there is no water spigot in the toilet, one must fill the bucket with water before entering. The water (never paper) is used to clean oneself, and to pour down the hole to flush it clean. Because most toilets are used by 6 to 12 people each day and night, many of whom are children, keeping the closet clean is impossible. Furthermore, the subject is not one fit for conversation, and as such, is ignored. More often than not, the smell is unnerving.

The most used part of the house is the central courtyard. Maimouna's courtyard is particularly charming because of a tiny garden in one corner. Two tomato plants, a small sycamore tree, and several spice bushes (including basil, capers, and mint) are enclosed in a patch of dirt by a semi-circle of rocks. A mortar and pestle, the canoon, and a rug are also left in the courtyard, and on laundry days, clothes are pinned up to dry on a rope hanging from one wall to another.

A typical day in the life of a Karian woman.

Like all of the women of Karia, Maimouna's day begins before dawn. She awakens at the sound of the call to prayer, broadcast over a loudspeaker from the minaret (tower) of the mosque (the holy building where men go to pray and listen to the imam, a religious leader, speak on Fridays, the holy day). She rises before her family, dresses herself in
a light cotton shirt and a skirt, and ties a scarf over her hair. If she leaves the house, she'll put on shoes, but she never wears them in the house or courtyard. She lines her eyes with kohl, and fastens two small gold earrings onto her pierced ears.

Maimouna's face is smooth from the sugar-paste treatment she uses to remove her body hair. This treatment consists of applying patches of a paste made of boiled sugar, honey, and lemon to the skin, allowing the paste to dry, then ripping it off the skin. Like all village women, she began sugar-pasting when she was about to be married, for reasons of aesthetics and cleanliness, and has continued to remove all of her body hair, every six to eight weeks, except for the hair on her head.

After dressing herself, the first thing Maimouna does is to fill a bowl with water, take the bowl and a piece of soap into the toilet, and wash her face, hands, feet, and genitals in preparation for the morning prayer. When she is clean, she goes back into the courtyard, rolls a mat onto the concrete floor in a corner of the courtyard, covers herself with her safsari, and lowers herself onto her knees on the mat. As the prayer ritual demands, she leans over until her forehead touches the mat several times, and continues to execute the various standing and kneeling postures required as she recites the prayer. When she is finished, she feels ready to begin her day. She likes to do the prayers, which are required five times during the 24 hours, because it gives her a sense of worthiness, and she simply feels better when she is practicing them.

Maimouna does not have a refrigerator. She keeps perishable food in the cool pantry area. This morning, she goes to the pantry and takes out a box of milk (treated so that refrigeration is not necessary), a packet
of coffee, sugar, bread, olive oil, and figs which her husband brought from the field yesterday. In the courtyard, she prepares the coffee and milk on the canoon, then sets the low table with bread loaves, a jar of oil, the figs, and the coffee. Her family is awake now, and ready for breakfast. They eat together—her husband and the children—with Maimouna helping the younger ones. Maimouna eats afterwards.

After washing his hands and face in a bowl of water, Maimouna’s husband leaves for work as a laborer for the municipality. He does not make enough money to buy extras, like a new dress when Maimouna wants one, or a television, but Maimouna is satisfied because he has a steady income. Not all women in Karia are so fortunate.

Maimouna helps her three older children dress and prepare themselves for school. The 12-year-old boy is in the sixth grade, the 9-year-old girl, in the third grade, and the 6-year-old boy, in the first grade. When they are dressed in their clean clothes, with their hair combed, Maimouna sends them out the door. The 3-year-old remains at home with her.

Maimouna cleans up the breakfast meal, then brings two round, heavy, metal tubs out into the courtyard. She fills both with water from the only spigot sticking out of a wall in the courtyard. (This is her "running water"). She gathers her family's dirty clothes, throws them into one of the tubs of water, and with a knife, scrapes pieces of a green square of homemade soap into the tub. She scrubs the clothes in the soapy water, then puts the heavy mass into the clear water to rinse. She dislikes this chore because her arms, neck, and shoulders are always sore the next day. But she tells herself that at least she isn't washing
the heavy rugs and blankets this time. She hangs the dripping clothes on
the line extending across the courtyard. It is midmorning now, and the
sun is already hot enough to dry them.

Maimouna moves the rug from the courtyard into a room, then dumps the
buckets of water out onto the courtyard floor. With a broom, she sweeps
the water out the front door, cleaning the floor as she goes. A drain on
one side of the concrete courtyard, and the sun, cause the remaining
water to disappear quickly.

The second call to prayer is sounded, and Maimouna repeats the prayer
ritual she has performed hundreds of times by now. When she has finished
praying, she straightens up the rugs, blankets, and pillows in both
rooms, then fixes herself a glass of tea. After her moment of
relaxation, she begins to prepare lunch.

She fixes chakchouka with eggs, and serves it with bread and fruit to
her husband and children when they return home for the siest (i.e.,
"rest", from the Spanish word "siesta"). After eating, they all rest for
an hour or so (except for Maimouna), then get up and return to work and
school. Maimouna eats and feeds her 3-year-old, then washes the empty
bowl, cooking pot, knife, and spoon under the spigot. The call to prayer
sounds for the third time. She performs the prayer, then drinks another
tea, and falls asleep for an hour.

She awakens to the knock of someone at the door. Her friend and
next-door neighbor Essia, with her 1-year-old baby, has come to visit.
They sit on a rug in the courtyard and chat for awhile, drinking tea and
eating almonds that they crack with their teeth. They talk about their
neighbors, Maimouna's sister's upcoming wedding, and their children,
comparing the possible futures of the latter. They have discussed these topics in detail so many times, that to make the conversation interesting they must add an occasional rumor one of them has "heard", or speculate about so-and-so. Overall, the point of this social intercourse is not simply one of information exchange; the process of interacting and talking is an enjoyable pasttime in itself.

Essia has to return home to begin preparing dinner, a task that Maimouna has already started as they were talking. She has picked mint for tea, and basil, from the courtyard garden, and ground the basil with the heavy metal mortar. She uses the basil in the sauce she makes for dinner. She adds vegetables to the mixture, and before long, her husband returns home with a piece of lamb meat from the butcher's. (According to Muslim law, the lamb was slaughtered by slit-ting its throat, to allow all of the blood to flow out. Muslims do not eat blood.) She grills the meat separately on the canoon, and steams a pot of couscous on the gas burner in the pantry. She interrupts her cooking for a few minutes to perform the fourth prayer.

Couscous is a yellowish, coarse grain made from wheat. Maimouna's husband obtained the couscous from a relative, and Maimouna prepared it during the summer by sifting the grain, then spreading it out on cloth sheets in the courtyard. After two days of drying in the sun, she stored the couscous in large pottery jars in the pantry for use throughout the winter.

The whole family is home now, and dinner is ready. Maimouna pours water from a pitcher over her husband's hands, as he washes them before dinner. (This is an unquestioned custom for Maimouna. She would never
think of asking her husband to do the same for her.) The children wash their hands together, taking turns pouring the water into the bowl. Then Maimouna serves them several loaves of bread she baked earlier in the week, the couscous with vegetables and lamb in one large pottery dish, and a pottery jar filled with water for all. When everyone but Maimouna has eaten, and her husband has said Humd'allah ("Praise or thank you God"), they wash their hands and face again. The older children leave the house to play outside until dark, and Maimouna serves her husband a tea.

As he sips the drink, she asks him if she can go to her oldest sister's house this evening, for a visit. She made this request earlier today, but he ignored her then, savoring his authority in the matter. This time, he pauses for a few moments, then tells her yes, she can go, but to not stay too long because she must put the children to bed before it's late. (Both assume that the children will accompany her— he is referring to bringing them home early. He would never consider staying home with the children while she goes out.) Maimouna is happy, and looks forward to her evening as her husband leaves the house.

Her husband spends every evening in the local cafe, sipping strong coffee and talking with other men from the village. Possible business deals, family and village politics, and their sons' present studies and future accomplishments are discussed in length. This is considered an essential part of a man's life, and the rare man who stays home with his wife is not viewed favorably. Occasionally, Maimouna's husband takes his oldest son with him, but only when he feels like rewarding the boy for
something, or when he wants to show off his son for receiving excellent marks in school.

After Maimouna eats, alone, she cleans up the dinner mess, and washes the serving plates, cooking pots, and utensils. She then prepares herself for a night out. She puts on her favorite dress, a pair of high-heeled shoes from her wedding, and jewelry, combs her hair leaving the scarf off, and adds more kohl to her eyes. She enjoys impressing the other women with her good looks, even if most are her family members. (She would feel very embarrassed though, if a man other than her husband saw her this way.) She rounds up her children, changes the clothes of those who have soiled theirs, brushes their hair, and washes their hands and faces again. The children are also glad to be going to their uncle's house because there will be more children there.

Before leaving the house, Maimouna carefully wraps her white silk safsari around herself, covering all but her hands, feet, and face. She keeps the safsari from falling off by tucking the inside folds up under her arms, and holding the front together with her hands. She brings the top of the cloth up over her head and closes it, leaving only her eyes uncovered. Her identity is thus concealed from anyone she may pass on the narrow streets leading to her sister's house.

Maimouna does not think about not wearing the safsari outside. Not only would she feel embarrassingly exposed without it, but others would gossip about her lack of modesty so much that she would feel doubly humiliated. This is all besides the fact that her husband would never permit her to walk through the village without it, allowing other men to see his wife.
Despite the power of this tradition, Maimouna, and most of the other village women who have been to Tunis, do not wear the safsari in the city. Actually, Maimouna has been to the city only twice in her life, but both times her husband allowed her to walk beside him unveiled. How, one might ask, can one's modesty be dictated by the setting? For one thing, village women like Maimouna want to "fit in". They know that whereas conformity to village norms demands that a woman not be seen by any man outside of her family, the prevailing attitude of city dwellers is one of "modernity", as they define it. Wearing a safsari in Tunis is considered "backward", a sign that one is not from Tunis, but from a village or rural area considered by Tunisois to be "behind". Maimouna's husband does not want to stand out in Tunis as a man with an uneducated wife, and so, he allows her to wear her dress, heels, and jewelry with him. He is not comfortable with the situation, but he prefers it to being regarded by others as "ignorant".

Thus, wearing her safsari, and accompanied by her children, Maimouna walks the quarter-mile to her sister's house. Her sister, glad to see her, greets Maimouna with a kiss on each cheek, and ushers her in to sit on the rugs and pillows in the courtyard, with several other female relatives who have also come to visit. Maimouna kisses every woman once on each side of the face, then sits. The children rush off with the others their age, to play in a room or on the opposite side of the courtyard.

The women talk for several hours, sipping tea, eating almonds, baklava, and ribah (homemade pastries). They converse about the weather, today's activities and social interactions, their children's illnesses,
beauty, and school accomplishments, their neighbors' problems, including any disputes they have overheard, the difficulties of pregnancy and birth (related to a presently pregnant woman's problems), and Maimouna's youngest sister's wedding plans.

None of the women can read or write, and none of them have ever met a person outside of the village. However, one woman has been on the Haj (the religious pilgrimage to Saudi Arabia) with her husband, and several have been to Tunis for a day. But whenever a woman leaves the village with her husband, she never speaks to anyone but him. Even if she were to have the opportunity to go to a hotel, restaurant, or boutique, she would feel so uncomfortable and out of place that she would not enjoy herself. Although they hear about these activities from a woman who has an older son who studies in Tunis, Maimouna, and all of her friends must be content with their dreams and speculations about "the modern life".

Towards the end of the evening, Maimouna's 3-year-old falls asleep on her lap, and the other children lie down around her, acting tired and crabby. She decides it is time to return home, so she wraps herself in her safsari again, gathers her children together, and says good-bye to everyone.

At home, she puts the children to bed in their room, then goes to her own room. As the loudspeaker makes its nightly call, she does the fifth and last prayer of her day. (A sixth prayer call is broadcast during the night, but she does not wake for that call.) She goes to bed, and lies there thinking about her younger sister's wedding plans, unable to sleep from her excitement. The wedding will last the traditional three days, but her family has already begun to make plans months in advance.
Because she is the only sister of the prospective bride, she will share in the attention given to her sister. She thinks about the fun for a long while, until her husband returns home from the cafe, joins her in bed, and they both fall asleep.

The Women of Karia

Nazia.

Nazia is 28 years old, the wife of an agricultural and fishing laborer, and mother of four girls. She has been married for 10 years. Her two oldest girls go to school, and the other two will go when they reach the age. She is still nursing the youngest.

Nazia is fair-skinned with cheeks pink from the sun, and dark hair. Her face is sugar-pasted smooth and her eyebrows are two thin lines above her light brown eyes. She wears a lacy pink cotton dress, a pink scarf, and tiny gold earrings. Her voice is soft, her demeanor sweet. When she says that she rarely gets angry, her sincerity makes such an implausible statement believable.

She lives with her husband and children in the downstairs portion of a new two-story house her husband built recently. The upstairs is rented. Her house is unusual for the village in that the porch is in the front (European style), and there is no courtyard in the middle. The house of her parents-in-law is next door, and Nazia spends much of her time in the inner courtyard there, visiting her mother-in-law and sisters-in-law.

Nazia's problems are normal ones for her living situation. Her husband gets angry when he's trying to sleep and the girls awaken him. He yells at them and at Nazia, which causes them to cry. Nazia doesn't
consider her daughters' behavior a big problem. They fight, and she beats them, but because they are still young, and live near the beach, they have plenty of outside space to run and play in. Unfortunately though, they are not old enough to help Nazia with her housework.

Nazia often feels bored by her work. She has rarely been ill, although she remembers having a molar toothache many years ago. Her husband brought the hajem to the house, a local man who cuts hair, pulls teeth, cuts and bleeds backs, and circumcises baby boys. Nazia has never been to a derwish, and doesn't believe in them; she has never been to a marabout either, but she is not sure if she believes in them or not.

Nazia feels well physically. She looks forward to the future, to raising her children well, and to improving her living situation. But she doesn't think about the future or the past too much, because, as she puts it, "My mind is empty of problems. The idea of boredom is meaningless to me, because my life is the same with it or without it."

Kadouja.

Kadouja is a plump, cheerful, 35-year-old, with olive skin, dark eyes, and black hair that she dyes (with a traditional treatment) to make it even blacker. Despite one gold tooth, and a disfigured blind eye, she considers herself very attractive, and pays close attention to her looks. Her skin is always sugar-pasted, her eyes are lined with kohl, and her feet are decorated with henna (a fine red powder dye made from the ground henna plant). She uses the swec leaves to redden her lips, toothpaste to whiten her teeth, and also rubs a sugar cube across her teeth to clean them. She wears gold earrings shaped like grapes, a ring, bracelet, no scarf, and a silky black slip around the house. She dons a
skirt, but not a blouse, for female visitors. She is an uninhibited woman, with female visitors, and sprawls herself out on the rug rolling over on her back or stomach whenever she feels uncomfortable.

Kadouja's husband is a vegetable vendor. He was originally married to her sister, who died, so he then agreed to marry Kadouja. After 13 years of marriage, they have only two sons and one daughter, because Kadouja has been using contraceptives since her last child's birth.

She used the Pill for a short time, but it gave her "yellow blurriness and black lines" before her eyes, so she stopped. Subsequently, she used the IUD for 8 years, but had to stop that also because of hemorrhaging. For the last 3 years, she has used the Calendar and a traditional contraceptive, the latter because she knows the Calendar is not reliable. She took the traditional medication only once: she ate six seeds of the plant called amber (which strongly resembles a sycamore tree), to prevent pregnancy for six years. Her husband and family agree with her decision to stop having children.

Kadouja's biggest problem concerns her husband, and although she jokes about it, the conflict is a serious one. Her husband wants to make love with her every night. Kadouja wouldn't mind so much if she weren't doing the prayers, but she is. Normally, when she does the five prayers, she is required to wash only her hands, feet, face, and genitals, before each prayer time. But if one has had sexual intercourse, Quranic law requires that the entire body be washed. Thus, Kadouja has to wash her whole body every day— a time-consuming task in a small house with little privacy and no running water. Kadouja admits, however, that sometimes
she can use her husband's needs to gain something she wants from him. She laughingly says, "I hire him."

Kadouja's usual behavior is to submit to her husband's demands, because, as she says, she has no choice. Afterwards, she feels angry and cries, but he never apologizes. Occasionally, she refuses to sleep with him, but he only follows her into the other room. When she persists, he gets angry, and doesn't speak to her for a couple of days, to punish her. She can't tolerate this treatment, and goes to her mother's house to protest (a humiliating event to any husband), but she always returns at her mother's encouragement.

Kadouja has had two serious illnesses. For the first, hepatitis, she went to a village woman known to treat only this illness. (Kadouja does not believe in the derwish or the marabout.) This woman has no special name, but everyone knows she can cure jaundice and hepatitis.

For three Saturdays, Kadouja ate nothing in the morning before going to the woman's house. The first thing the woman did was to cut Kadouja's arm (in the vaccine area), inside knee, and between her eyebrows. The purpose of this action was not to bleed her (as people do for headaches), but rather, to sample Kadouja's blood. On the first two Saturdays, because Kadouja's blood was found to be "yellow", the woman gave her a medication to eat. The medication (which Kadouja is afraid to describe to a pregnant woman because she is afraid the latter will crave it), was a sauteed bread roll filled with honey and vinegar. The remedy worked, because on the third Saturday, Kadouja's blood was red again.

The other illness Kadouja had was eczema. She also went to a local woman for the traditional treatment of this problem, although this woman -
is not the same one who treats hepatitis. The second woman inserted a sewing needle in Kadouja's arm, which made Kadouja faint. When Kadouja awakened (two hours later, she claims), the woman had sprinkled orange flower water on her head (a treatment Kadouja uses for her headaches). Subsequently, Kadouja's eczema eventually disappeared.

In general, Kadouja is a happy woman. She doesn't worry about the future, because, as she says, "The future is my husband's problem." She fears God's punishment if she wears makeup and goes unveiled outside, because, as the imam (religious leader) said (or so she heard), "God will punish the woman by hanging her by her hair, hands, and breasts over a burning fire after she dies." But Kadouja never goes out without the safsari, she feels worthy, and confides, "My heart is always glad."

Saida.

Saida is 38 years old, has two sons and seven daughters (including one set of twins), and has been married for 21 years. Including her husband, 10 of them live in a small, two-room house. (The oldest daughter is married and lives with her husband.)

Saida is a very different-looking woman— that is, different from the other women of Karia. She is petite, has large widely-set eyes that turn up at the edges, a wide flat nose, spaces between her teeth, white skin, dark hair, and dark eyes. She wears a t-shirt, skirt, and some jewelry. She is normally a calm woman; it's difficult to imagine her angry.

Saida only feels overworked when she is ill. But normally, she enjoys her work, as she has older daughters who make the workload manageable. Her problems mainly involve her husband and her neighbor. Regarding her husband, she doesn't like him to beat the children. She
doesn't mind if they have done something bad and deserve correction, but she gets upset when he beats them severely with a belt or rope, slaps them, and pulls their hair. When he does this, she intervenes, so that he becomes angry at her instead of the children. He yells at her, then leaves in a rage, because he can't beat her. Although some men do hit their wives, beating his wife is not acceptable behavior for a man in his family.

Saida has a serious illness, for which she takes medication daily. Because she has never attended school, she cannot read the labels on the pills, but the fact that she does not know the name of her illness, or the medicine, does not bother her. She only knows that she has nausea, heart pains, "yellow blurriness", difficulty waking in the morning, trouble getting her breath, and that "the world turns" (i.e., dizziness), when she doesn't take the medication. She spent two months in the hospital three years ago, and ever since then has had a doctor's appointment every two months.

Because of her illness, the doctor won't let Saida take the Pill even though she and her husband both agree that she must stop having children. The doctor has encouraged her to have "the operation", because he too believes she should stop having children, but Saida and her husband are afraid of this step.

Consequently, since her last child, Saida has become pregnant twice. However, she miscarried both times—once at two months, and once at six months. The miscarriages have led Saida and her mother to conclude that Saida is nearing menopause and can no longer have children, thus, taking a contraceptive is unnecessary. Saida does not seem to recognize that
pregnancy itself, not to mention miscarriages, are dangerous to her health. She thinks she'll be fine as long as she doesn't give birth.

Amel.

Amel is 25 years old, has been married to her mother's cousin for eight years, and has three young children. She attended school up to the fifth grade, but has forgotten most of what she learned because she has no use for it. She is a pretty, sweet woman, with light skin, delicate features, and dark hair and eyes. Her skin is pasted smooth.

Amel lives in their four-room house with her husband, children, mother-in-law, and sister-in-law. The house belongs to Amel and her husband. Although the rooms and center courtyard are small, there is one room for each of her in-laws, one for her and her husband, and one room for the children.

Amel is not overworked, as her sister-in-law helps her with the cleaning and cooking. She considers her embroidery "fun work", that is, she enjoys it, although she also does it for the money. Her children fight like all kids do, but she doesn't consider their behavior a big problem. However, this week, her littlest boy did upset her when he spilled a pot of boiling hot chakchouka on his hand. The pot was in the courtyard, on the concrete floor, and when she turned away, he crawled over to it, and burned his hand in the sauce. Amel uses both traditional and medical treatments for his burn. Twice a day, she puts tortoise oil on the burn with a feather (a man in the village kills tortoises, extracts the oil, and sells it), and then covers the oil with red mercurochrome that her husband bought at the pharmacy. The burn is still
an open wound, though, and makes the boy cry frequently. She feels sorry for him and rocks him when he comes to her for some comfort.

Amel's husband is, in her words, "tough". She is afraid of him, even after eight years of marriage, especially when he drinks. She has to ask his permission to leave the house for any purpose, and frequently he says no. The only places she ever wants to go are to a female friend's house, or to her mother's home.

When he is angry (which is often), he yells at her and insults her. She just keeps silent, and her suppressed rage and fear make her ill. She feels weak, dizzy, her eyes have "darkness" in them, and she gets a bad headache. She also has this illness sometimes when she's not angry. She has never been to a derwish, nor to a marabout, only to the doctor who gave her shots that didn't help. Still, she doesn't consider her illness a serious one, probably because most of the women she knows have the same symptoms.

Mejda.

Mejda is 31 years old. She has never been to school, married her husband at her parents' request when she was 18, and now has three daughters and one son. The six of them live in a "lean-to" made of two concrete walls (i.e., the outside walls of two houses), bamboo branches, and cardboard. The tiny hut (about 10 square feet) contains two old mattresses with dirty blankets on the ground, food and cooking utensils, a television, and clothes hanging on a line. Mejda and her husband own a house in the village, but they rent it out for the money during the summer to Tunisians who want to live near the beach.
Mejda's life has been plagued by illness. Her oldest daughter, a pretty, normal-looking, 13-year-old, has developed a skin disease during the last six months. Her brown skin has huge pink and white patches on her arms, legs, scalp, and face, where the pigment has disappeared. She is embarrassed by her appearance, but continues to go to school. The disease has improved recently, with some medicine the doctor gave her, and the white patches are gradually turning pink.

Mejda's next two children- girls ages 9 and 11- were born mentally retarded. (Mejda simply calls them "ill"). The girls are identical in appearance, except that the older one is twice the height and weight of the younger. Each has a broad face, tiny eyes and mouth, and a wide jaw (which, incidentally, is less pronounced, but also a characteristic of Mejda's face). They are obese, and eat constantly. They cannot see well, have raspy voices when they speak, which is not often, and they cry and whine continually. Mejda says they also have diarrhea, chest pains, and trouble breathing. The older one has six fingers on both hands and six toes on both feet. The doctors don't know what is wrong with the girls, and told Mejda that they have "sent their files to France".

Mejda's youngest child, a four-year-old boy, looks like both the normal girl, and the ill girls. His head and eyes are disproportionately large for his thin little body, but not extremely so. Mejda thinks he would've been like her two ill daughters if the doctor hadn't given him medicine since he was born. (The fact that he has been helped by the doctors indicates that they may know what the problem is, although Mejda does not.) Mejda plans to send her son to school when he is old enough.
Mejda's husband is also sick. He has had constant stomach and chest pains for six years, and has stopped drinking tea and smoking. He takes medicine, but it doesn't help.

With all of these problems, as one would guess, Mejda is also very ill. She used to have chronic headaches, faintness, and weakness, but during the last year and a half, she has taken pills that help. She also had an allergy that made her nose run, her eyes red and teary, and her face swell, but medicine from the doctor cured that problem too. She still experiences tingling and numbness in her fingers and left arm, pains and numbness in her legs, and her heart races sometimes.

Living in the hut during the summer, with her chronically ill family, Mejda naturally feels overworked. Her oldest girl helps her by watching the other children while Mejda cooks meals and does laundry. Fortunately, it doesn't rain during the summer, and the sunshine makes everything seem a little brighter (in comparison to the dark rainy winters). Sometimes when she's angry, Mejda feels bored with her life, but she never wishes she would die. She feels worthy and needed, and she always has the hope that her family will become healthy. She also wants to have another child- a healthy one.

**Arroussia.**

Arroussia lives in a three-room house with her husband, seven of her eight children (one is married), and her mother (a tiny, crumpled old woman who is nearly deaf). The small rooms, painted a cool aqua blue, surround a small concrete courtyard with two tabounas on one side. A covering, made of branches and straw, shades the tabounas, and a huge pottery water jug leans against one wall.
Arroussia is approximately 40 years old, but looks older. Her eyes are deep in the sockets, her face thin and worn, and her teeth rotten. She has large nostrils, and high wide cheekbones, resembling a Bedouin woman. She wears a dirty t-shirt, skirt, scarf, and one earring.

Arroussia has actually had 10 children, but four years ago, two of them (her 3-year-old son and 12-year-old daughter) died of measles, two days apart. Arroussia cried and mourned, but she didn't beat her thighs or scrape her face, because, "Women in Karia don't do this." She still feels sad about her children's deaths though.

Arroussia's last birth was "too difficult", so her husband agreed to let her have "the operation". Although the house feels crowded, she does not have problems with her children fighting. Four of them go to school, the youngest will go when he's old enough, and the other two dropped out because, at the time, Arroussia's husband couldn't afford their school supplies.

Although Arroussia has never been to school, and has never considered the possibility of working outside her home, she makes money daily by baking bread that her children sell for her. She works for several hours in the intense heat of the tabouna, baking 30 to 40 loaves each day. She keeps enough to feed her family, then sends the rest with the children. They stand by the road (along with other children selling eggs, watermelon, and bread), waving a bread loaf up in the air whenever a car drives by. They get 100 millemes (about 10 cents) for each loaf. Arroussia uses the money to buy her supplies, and food and clothing for her family, as her husband (a mason) is usually unemployed. The work is grueling, but she wants to build a better future for her children.
Naiima.

Naiima is a huge woman— not tall, but obese. Her skin is stretched smooth, making her appear younger than her age, which is 38 years. She is a friendly, outgoing woman, who loves to visit, and can talk for hours without stopping. She pays careful attention to her appearance, as her pasted skin, thin eyebrows, lined eyes, and dyed black hair show. She wears a frilly pink-flowered dress, a pink scarf, delicate gold earrings, bracelets on both arms, a ring, a bead necklace, and thongs. Her hands and feet are red with henna. Although she never tires of talking about her illnesses, she never mentions her weight as a problem.

Naiima knew her cousin before she married him, and she says they have no problems now because they love each other. What she probably means is no problems she considers important enough to speak of. But even if she does feel angry at him occasionally, she is consistently respectful and caring when she speaks of him, and her positive regard appears sincere.

Naiima has all of the other problems women typically experience in the village, and her greatest difficulties concern childbirth and illness. She was married when she was 16, became pregnant, and had a boy who died at one-and-a-half years of "fever". Subsequently she had a girl, a boy, then a miscarriage at 6 months.

Just prior to the miscarriage, she had been hauling water on the donkey during cold weather. She was shivering by the time she returned home, and started bleeding. Her sister-in-law told her it was the evil eye, and gave her salty fish to eat. The remedy didn't help, so Naiima's husband tried putting orange flower water on her head. When that didn't
work either, they rode on horseback to the town center, where they found a ride to the hospital in the city.

Naiima says that she had an operation, and that the fetus was born dead, but like many village women, she does not always distinguish between a miscarriage and an abortion. Both occur when the woman is simply "unable" to have the child, for physical or psychological reasons (including when she does not want it). Thus, a woman who feels too ill to have a baby may go to a doctor for an abortion, but in referring to the event say that she "lost the child" because she couldn't tolerate the pregnancy.

After her "miscarriage", Naiima had a healthy boy, then used contraceptive ovules (suppositories) for four years. When she stopped using the ovules, she became pregnant again, and had that child at the hospital. She believes that after the birth, the doctor "sewed up the uterus", because although she still has periods, she can no longer conceive. She blames all of her illnesses on this operation. Although she loves children, she has accepted God's will that she have no more.

Naiima is sick often. She says the doctor told her that her "heart is swollen", or this is what she understood. One day three months ago, she became nauseous, faint, and dizzy. She vomited, experienced "blurriness and darkness", developed a headache, and heard sounds that weren't there. The doctor didn't tell her what was wrong, but gave her medicine that helped her recover. However, yesterday, the doctor had to return to her house, because she had "heart pains" and "swelling" in her sides. Again, he gave her some shots and some pills, which helped. She
believes that shots are more effective than pills, as they are certainly more frightening.

Despite her problems, Naiima is generally a very optimistic woman. After years of living poorly, she and her husband have finally finished their two-story concrete house. She feels worthy and respected by her neighbors, and looks forward to her children's marriages and to performing the Haj.

Behija.

Behija is 39 years old, plump, and has dark hair and eyes, and deeply tanned skin from the summer sun. During the summer, she lives on a relatively deserted beach (at the end of the road to Karia) with her husband and three of her four children (her oldest girl is married). Her husband is the spring keeper for the water company in Karia, and he has to stay by the water source for the season. At the end of the summer, they all return to their house in Karia.

Behija feels lonely in her two-room house by the beach. She has too much work to do, but her daughter helps her, and they ease each other's loneliness. Behija's sons (ages 11 and 16) fight constantly, forcing her to beat and/or separate them, two to three times each day. Her husband drinks too much. She used to blame him (verbally), but now she has resigned herself to his drinking, and believes that God will take care of the problem.

Behija's pregnancies were generally not difficult, but the births were. She "endured" the latter, but then decided, with her husband's and family's agreement, to use a contraceptive. She has been using the IUD
for the last 11 years, and although it gives her pains, and she has had it replaced twice, she prefers such problems to having more children.

Najet.

Najet is 33 years old, and an especially tidy woman. She is petite, pale, plump, and has short, perfectly trimmed black hair that is not covered by a scarf. For visitors, she wears a pink flower-print dress, gold earrings, two bracelets, and a short string of pearls around her neck.

Najet and her husband own a house in Karia, but during the summer they live in a tiny three-room dwelling with a straw-log roof, while they rent out their usual house. Living here was her husband's decision, one which Najet does not dispute.

Najet's husband is handicapped. Because of an illness (possibly poliomyelitis, but Najet doesn't like to discuss this), his legs are paralyzed, and he is unable to work. He spends most of his time sitting outside the house, in the narrow street, talking with other men who visit or pass by. The family of seven live on the money they obtain from renting their house, and on their oldest son's income.

Other than her husband's illness, Najet says she has no big problems. Her kids' fighting is not serious, her 14-year-old daughter does much of the housework, and her pregnancies were not too difficult. She has had no serious illnesses, and has few physical symptoms of illness. She stopped having children six years ago, when the doctor gave her a "shot". (Most likely, the injection made her unconscious, during which time the doctor performed the sterilization, but she remembers only the shot.)
Zaina.

Zaina is the wife of the imam - a spiritual leader of Karja. She is 35 years old, and has three daughters and one son. Zaina is a strange-looking woman, but it is difficult to distinguish what about her appearance makes her seem different. She has a long face, small eyes with dark circles underneath, and long, straight, dyed-black hair. She is plump, and wears a tight blue dress with the front seams nearly ripped out, earrings, a necklace, and bracelets.

She greets visitors normally, but has some difficulty answering direct questions about herself. She simply doesn't answer when she can't. Her husband is aware of her "difficulties", and sends their 16-year-old daughter to her, to help Zaina with her responses (although she is only needed for one or two questions). Whether Zaina is mentally slow, shy, or both, is unclear, but she compensates for any problem by her attention, cheerful attitude, and hospitality.

Zaina's main burden is her housing situation. She lives with her husband, their four children, her sister, and her parents in the latter's three-room house. The courtyard is tiny, and the house too small for nine people, so small that during the winter Zaina must send the children to the neighbor's house to do their homework. Although they have lived like this since they were married, Zaina continues to ask her husband to build a house, and feels hopeful that he will.

Samya.

Samya is a chubby, jocular, 27-year-old woman with short black hair, and small eyes lined with kohl. She is friendly and open, and enjoys talking about herself and her problems. Her three girls and one boy are
all under six years, and the three who are old enough to talk, are as outgoing as Samya. They chatter without pause to anyone who visits, whether the visitor understands them or not. Samya is nursing the youngest, and plans to start using the IUD when she begins menstruating again. She used the Pill for a year and a half before becoming pregnant with this child.

Samya went to school for four years, an experience reflected in her confidence towards her husband and his family. Samya's parents are also supportive of her. Up until last year, Samya and her husband didn't have electricity, a problem that infuriated Samya. After numerous arguments with her husband, she took her children with her to her parents' house for three days. There she received support and comfort, and the action itself served as an embarrassing social protest against her husband. After three days, he came to get her, and had signed up for electricity with the municipality- they have had electricity ever since.

Samya works in the field with her husband, picking fruits and vegetables for her own use. She likes this work better than her housework, but she can't go unless her husband takes her when he's not working. Sometimes she feels overworked when she does both her housework and field work, and occasionally she develops a headache from the latter if the sun is too hot, but she enjoys being out in the open field with her husband.

Hamida.

Hamida is 41 years old, and a mother of eight living children. She has a wide, flat face with high cheekbones, a large mouth, slightly
protruding teeth, and is about 50 pounds overweight. She has a light tattoo on her wrist.

Hamida has had to work for money because her husband is mentally ill, and has been unemployed for 16 years. She embroiders at home, and sells her work through a "middle woman". Although she would never mention her outside work to visitors, she is known to work at marriages, applying henna to the hands and feet of the participants - as evidenced by the black henna on her index finger. Furthermore, she has played in an all-female musical band at a wedding. Women in these bands are known to drink whiskey and smoke when they perform (only for other women, of course), and such behavior is accepted by the people who hire them, although it is concomitantly considered shameful.

Hamida's life is filled with illness and tragedy, which moves her to tears whenever she talks about herself or her family. Her husband has a mental illness that makes him violent, and since Hamida's last pregnancy six years ago, he has also been impotent. He went to the mental hospital three times, staying four months each time. Now he takes medication which keeps him from being violent, and he goes to see the doctor every month.

Three weeks ago, Hamida's youngest daughter, the six-year-old, developed a high fever and bruises. She was taken to the hospital, where she stayed for 16 days. The doctor said she had meningitis, and gave her "all new blood" (i.e., transfusions). Hamida feared for the girl's life, but her daughter is now home and well again.

Hamida's housing conditions are horrible, by any standards. There are 17 people living in their three-room house, including Hamida, her
husband, their children, and the wives of two of their sons, with their children. One closet-size toilet (a hole in the concrete), and one water spigot in the courtyard are shared by the family. The doctor has told Hamida many times that their health problems are due to this overcrowding, but they have nowhere else to go.

Hamida's grandson, who lives in this house, also became ill, seven months ago, with meningitis. He was ill for a month before his parents took him to the doctor. At the age of one and a half years, the doctor amputated his left leg. Now he is still not well. He cannot hear, and cannot move his left arm. The family is planning to take him to a bone specialist.

Hamida also had a serious illness 10 years ago. She had severe headaches for which she visited Manouba (the mental hospital near Tunis), and took medicine for three years. She still has headaches, but they are not severe. More recently, three months ago, she developed a serious urinary infection which forced her to spend six days in the hospital. The doctor wanted her to stay longer but she couldn't tolerate the place. She now has similar pains in her back when she works too hard.

Hamida continually experiences physical symptoms; she is perpetually anxious and depressed. She feels worthless much of the time, and hopeless to change her situation. Her few outlets consist of visiting her friends and relatives, praying, and reciting the Quran. When she feels her worst, she believes something may be wrong with her mind, and says "Every day, I wish I would die."
Latifa

Latifa is Hamida's daughter-in-law, that is, Latifa is married to one of Hamida's sons, and lives in the same house. Latifa is timid, and afraid of her mother-in-law. She is a tiny, thin young woman with big eyes, dark eyebrows, and an easy smile. She appears quiet but confident with visitors, answering questions without difficulty, but not giving any excess information.

Latifa is not the daughter-in-law whose son had his leg amputated, but her son was also ill last year with a fever, at the age of three years. He spent 12 days in the hospital in Tunis, and every day her husband took her to Tunis (three hours round trip) to see him. He is well now.

Latifa's husband beats their kids three to four times a day. In such cramped quarters, fighting is inevitable, and Latifa frequently hits them too. Of course, they never hit the baby, who is only one month old. But Latifa slaps the two-year-old boy often for biting and pulling the hair of his five-year-old sister.

Latifa was "ill" during all three of her pregnancies, and had to have a caesarian for each. The last time, the doctor performed the "operation" to prevent her from having more children. Both she and her husband are glad that she can no longer conceive.

Latifa is overcome by her problems and living conditions. She feels worthless, hopeless, ashamed, and trapped. She says she blames herself for one thing—getting married. Concomitant with her mother-in-law's statement (which she did not hear), Latifa asserts "I want to die."
Fethia.

Fethia is a mature, 25-year-old woman who attended school for five years. She has large bones and features, and tan, rough skin. She wears a torn white cotton dress, and does nothing for her appearance. She wears her black hair pulled back in a ponytail, no makeup, no jewelry (she had to sell her earrings), and her heavy eyebrows and a faint moustache show that she has not been sugar-pasting her skin.

Fethia lives with her four children and her husband in a two-room house. The toilet hole in the courtyard is hidden only by an old curtain of cloth, and there is no spigot to provide the house with running water. But the rooms are clean, including the tile floors, and contain a television and some furniture.

Fethia has been dealing with tragedy for many years. Her husband developed cancer in 1971, was recovered for seven years, then developed malignant cancer in 1978 and has been slowly dying since. One of his legs has been amputated, and the other is paralyzed, so that he can only spend his days sitting in the street watching and occasionally talking to passers-by.

Because her husband is unable to work, they have no income. They tried to obtain financial aid from the government, which gave him a pittance (7 dinars= $7.00 per month) for a short time, but they no longer receive any money at all. His brother gives them money when he can, and in desperation, Fethia allows her children to beg in the streets. Her voice drops with obvious embarrassment when she admits this.

Several years ago, Fethia's breast began to swell, and she went to the doctor in Tunis. He told her she had a tumor, then performed an
operation to remove it. Presently, she is suffering from varicose veins
that cause tingling and pain in her legs, and excessive bleeding and pain
from her IUD. She is unable to use the manual sewing machine that the
rural development program gave her to sew things she could then sell.
She cannot afford to go to Tunis to see a doctor, but she did go to a
nurse for both problems. The nurse could do nothing for her legs, and
agreed to remove the IUD only when Fethia returns with money.

Fethia feels hopeless and worthless, and cries easily and often. She
feels ill more often than she feels well, but never wishes she would
die. Although her financial situation is bad, and her husband is dying,
she can depend on her family and friends. She goes to them for comfort
and help when she is upset. She also has healthy children who need her,
and all three (who are old enough) are succeeding in school.

Fatma.

Fatma is 35 years old, has four children, and is nine months
pregnant. She lives in a two-room house on a hill, a few hundred feet
from the connected houses of Karia. The house belongs to Fatma and her
cousin-husband, but her husband's sister, and the sister's husband and
children, live with them. Each nuclear family has its own room, and the
children sleep in the same room with their parents.

This living arrangement causes problems for Fatma, because Fatma's
sister-in-law is very protective of her brother, and jealous of Fatma.
When someone comes to see Fatma, for example, her sister-in-law tries to
sit with them in order to hear every word, and if she is not allowed, she
angrily protests that she will "tell on Fatma" to her brother. Fatma
handles these encounters with patience, but sometimes she also gets upset
and cries. When her husband returns home, he takes a neutral stance on
the issue in front of the group, but in private tells Fatma that he'll
take care of it (i.e. he sides with her). Consequently, Fatma feels
better.

Fatma is not having any problems with her pregnancy, except that she
hates her own cooking. This is typical of most of the women she knows
though (when they're pregnant). Sometimes she eats what her
sister-in-law makes, but she doesn't crave anything in particular. Fatma
is doing her regular household duties up until the birth. She feels
overworked now, but her sister-in-law helps her, and Fatma knows the
feeling is only due to the pregnancy.

Although Fatma had hepatitis a year ago, she usually feels well. For
the hepatitis she ate a traditional remedy of grilled calf's liver with
honey and saffron, but also had to stay in the hospital for one month.
She is fine now. She has few physical symptoms, and is rarely anxious or
depressed. As other women have said, she too states, "I don't think
about the future."

Tunis

Tunis, located in the northern Tell, is the largest city in Tunisia,
with a population of approximately 1,179,000 (INS, 1983). Because it is
the capital and the commercial and educational center of the nation,
Tunis is considered by most to be ahead of other areas in terms of
modernization, including greater freedoms and employment opportunities
for women and men.

Not only does Tunis offer the greatest concentration of schools,
libraries, movie theaters, clothing stores, restaurants, and apartment
buildings, it is the home of most governmental departments, the national radio and television stations, and the newspaper publishers. Furthermore, Tunis has an international airport, making the city a major stopover and a convenient tourist destination. Although most tourists travel directly to hotel resorts (which are relatively isolated from the mainstream of Tunisian life), tourists from Europe, Scandinavia, and other Arab countries are not an unusual sight in the city center.

Possibly because the inhabitants of Tunis are continually exposed to the artifacts of modernization, they have become more tolerant of relatively new ideas, particularly those regarding women. Although no statistics are available on the number of women working outside the home in Tunis, one need only visit a hotel, office, school, or governmental agency to see that women are employed in white-collar occupations, although they are definitely in the minority. As one Tunisian noted in a discussion of the subject, living in Tunis is expensive. Whereas paying rent is unheard of in a rural area, and nearly so in the village, it is common in the city. In addition, in Tunis one must buy food that rural and village dwellers grow themselves, and one must pay for transportation—public or private. Wages are low, even for men, thus, a woman's income is valued as an important part of the household income.

Of course, the fact that many women in Tunis work outside their homes cannot be stated without considering the role of education and social class in lifestyle. That is, in order to gain employment, a woman must be educated (at least to read and write), and live in a family or with a husband who values education and employment for women (values more common among the middle and upper-middle classes). The importance of this
latter factor in a woman's education (i.e. living with a family or husband who accepts this additional role for her) is apparent in the Tunisian societal structure based on familial connections, which facilitate (and even determine the possibility of) recreational, economic, educational, and occupational pursuits. In short, a woman cut off from family ties—be it her family of origin, her husband and children, or an adoptive family—could scarcely survive, anywhere in Tunisia. The society is simply not designed to incorporate single working women (i.e. those not living within a family).

However, in Tunis, many women work outside the home, in addition to their work in the home. The typical Tunisoise (the term used for a woman whose family originates from and lives in Tunis, usually of a middle- to upper-middle-class status because of her family's residence in the city; "Tunisois" refers to a man with such a background), unlike the Bedouin and conservative village woman, does her own shopping at the neighborhood grocery stand, or if possible, in a modern store. If she does not have a daughter who can help her with the housework, she may hire a maid if she can afford the expense. On the average, she has two children, and uses a contraceptive to keep from having more.

A typical middle-class apartment in Tunis consists of four small rooms off a narrow hall. One room is the living area, and contains a couch-bed, television, coffeetable, pictures on the walls, and a rug on the tile floor. A kitchen is adjacent to the living room, and in it are a refrigerator, stove, sink, shelves or cabinets holding plates and utensils, a European-style dining table, and chairs. The water closet
(toilet) is usually located next to or in the kitchen, for plumbing reasons, and in small apartments, the kitchen sink may also serve as the bathroom sink. A shower stall or bathtub may be found in another small room, or a portable metal tub may be used for bathing. Dishwashers, electrical clothes washers and driers, and other electrical appliances are virtually nonexistent.

The other two rooms are bedrooms, each sparsely furnished with a bed, shelves or a European wardrobe, a Tunisian rug on the floor, and pictures on the walls. Three- and four-story apartment buildings are common. A typical house in Tunis is similar to the apartment in its interior, although it often has a garden and a high gate surrounding it outside.

Speaking of the "typical" Tunisoise obviously involves a greater danger of making false generalizations about behavior and lifestyle than when one speaks of groups with more homogeneous living patterns and socioeconomic levels, as in the Bedouin, and to a lesser extent, the village groups of women. In order to decrease the likelihood of such generalizations, a brief description of each of the women interviewed should provide an idea of the similarities and differences among the women of Tunis. In an attempt to match the lower-middle- to middle-class status of the village women interviewed, no upper- or lower-class Tunisoise were included. Furthermore, all of the women were either raised in Tunis, or were raised in another large city (two in Sousse, and one in Monastir until the age of 10) and subsequently moved to Tunis with their families or husband.
Neyla.

Neyla is 40 years old, and the director of a kindergarten. She attended school through the third grade in secondary school (equivalent to the ninth grade in the U.S.), then married her husband, who is now an accountant for the government. She speaks a few words of French.

Neyla is a plump woman of medium height, and black African features. She has beautiful eyes that she lines with kohl, and a ready smile and laugh. She wears a fashionable dress and a scarf on her head.

Neyla's home is especially comfortable. It is a house connected by its outer walls to other houses, with a tile courtyard at the entry. The living room, kitchen, and two bedrooms are small, and except for the kitchen, stuffed with heavy furniture and knick-knacks. The living room also contains pictures of Neyla and her husband on the Haj, a television, and a video-cassette recorder (the latter being the latest status symbol, available to those who travel abroad, or who know someone who does). The bathroom contains a Western-style porcelain toilet, sink, and tub.

Neyla started her work in a public kindergarten as a teacher, then eventually left that job to form her own kindergarten. She ran her school for several years, until the building rent was raised to a price she could not afford. She closed the school, and rejoined the public kindergarten, as a director this time, which is her current employment.

Neyla knew her husband, although not well, before she married him. He asked her family if they would accept his marriage proposal, the family asked her, and she accepted. They now have a congenial relationship, although they argue occasionally about certain conflicts.
like the time two weeks ago when he wanted to leave her friend's house before she did. He asked her several times to get ready to go, she ignored him, then he said he'd leave her there. They both became angry, and she didn't speak to him for two days (i.e. only necessary words), until he became affectionate with her. Then, she brought up the conflict, they discussed it, and both felt better. But Neyla considers these problems minor.

Neyla enjoys her work at the kindergarten, and considers the housework her duty. She says, "If it's a problem or not, a woman must do it." She feels overworked about three times each year, when she does the "spring cleaning" in addition to her regular work. Her husband doesn't help her.

Neyla and her husband cannot have children. Because this is a big problem for her, and an embarrassing one, she does not like to talk about it. She simply says, "I am hopeful and pray that God will give me a child." But she has been hopeful for the last 17 years.

Neyla is the oldest child in her family of origin, and thus, sometimes the object of her sisters' jealousy. Recently, for example, one sister came to her to ask her opinion of their younger sister's proposed marriage to a divorced man from the South. Neyla said she only hoped it would be considered carefully because the man was divorced and might return to his wife, and the South is very far from Tunis (the assumption being that the woman would move to her husband's home). Subsequently, Neyla's sister lied to their family that Neyla was against the marriage, and the family stopped visiting Neyla for eight months. Neyla knew she was right, so she did not visit them. After the eight
months, her father came to see her, and they discussed the whole misunderstanding and agreed to reunite.

Neyla's mother died 10 years ago, and her mother-in-law, 3 years ago. Following the latter's death, Neyla was ill for three days with a headache, and now she refuses to go to any dead person's house because she becomes too upset.

Neyla is not ill often, but during the last year she has developed numerous bruises that don't heal. She doesn't believe in the derwish, but she does go the marabout, although not for a problem, she says.

The distinction women make between going to the marabout for a "visit" versus for a "problem", is probably best explained by a concern for social appearances in those who call it a visit. That is, visiting a marabout is a religio-spiritual action in itself that takes a certain amount of effort and planning, but which is seen by some people as superstitious. Thus, women concerned about appearing educated often specify that they go for a visit- not for an illness or a problem.

Neyla has also gone to the doctor, who gave her an analgesic and calcium pills, and told her she has "poor blood circulation" and is "very sensitive to her own anger". In other words, Neyla gets ill from her rage. She also suffers from every anxiety symptom one can think of, and many somatic symptoms. But she never thinks about wanting to die; she feels worthy, and is hopeful about the future.

Radhia.

Radhia is a large-boned, tan, 38-year-old woman who lives with her husband (a company worker) and their two girls, aged 13 and 8. Her concern for her appearance is evident in her fashionable red dress, short
dark hair, painted fingernails and toenails, gold rings and pearl necklace. She attended school through the fifth grade, and thus speaks a little French. (The ability to speak, read, and write French opens the door to learning about a foreign culture, and to social interactions that are closed to illiterate and monolingual women and men. Because it is considered a very desirable skill, speaking French often increases the speaker's self-confidence too.)

Radhia's biggest problem is her mother-in-law, who Radhia believes is jealous of Radhia's relationship with her husband. Her mother-in-law continually causes conflicts for the family by gossiping and saying untrue things. But what bothers Radhia most is that sometimes her husband seems to prefer being with his mother, for example when he deliberately starts an argument over something trivial, then leaves the house angrily, all as an excuse to go to his mother's house. When this happens, Radhia keeps silent so that her mother-in-law will not know how upset she is. These family problems have been going on for 13 years.

Radhia also has problems with her own family. Only a week ago, she had a wedding party for one of her sisters who married a man from a Bedouin family. Despite his "lower-class origins", he is a good and educated man whose occupation is a judge, so Radhia and the family approved of the marriage— with the exception of one other sister, Saida. To resolve the conflict, Radhia went to see Saida, talked with her, and asked her again to come to the wedding. Saida refused, and still has not changed her mind.

Radhia's older daughter helps her with the housework, and the customers who pay Radhia to knit for them are reasonable, thus, Radhia's
main problems concern her relationships with her family of origin, family-in-law, and her husband. She doesn't believe in the derwish or marabout, and goes only to a doctor when she has stomach pain from her anger at her family. The doctor gives her some pills and an antacid that help. When she also has a headache from the anger, she puts olive oil on her head and goes to the hammem (Turkish bath).

The hammem is a public sauna and bath where women and men traditionally have gathered (separately of course) to clean themselves and to socialize- both activities being of equal importance at the hammem. However, with the development of modern bathroom facilities in homes in Tunis, they are declining in popularity.

Radhia has never used a contraceptive because she has been pregnant only three times during her 15 years of marriage. Two of these pregnancies resulted in the birth of her two daughters, but the last one she aborted with a self-administered injection she obtained from the pharmacy, because she doesn't want more children. She didn't tell her husband, but his two sisters have also become pregnant infrequently, so he doesn't consider their situation abnormal. Until she reaches menopause, she will continue to abort any pregnancies if they occur.

Overall, Radhia has few physical or anxiety-related complaints, but she does feel angry and depressed often. She feels lonely, sad, and low in energy. Sometimes when she is very angry, she hears voices- someone calling her- which she attributes to "nerves". But in general, Radhia is not a hopeless person; she waits for the time her mother-in-law will die, and the consequent improvement of her life, and she also looks forward to her daughters' success.
Kareema.

Kareema is a young-looking 45-year-old woman whose perfectly made-up face, short, coiffed hair, and painted nails give the impression of a woman who is exceptionally self-conscious and controlled. Her wristwatch, designer glasses, erect posture, and the rarity of her smile, all add to the effect.

Kareema has a high school diploma, and considers herself an intelligent woman. Her education is particularly exceptional for a woman of her age. Whenever possible, she prefers to speak French, and even when the dominant language in a conversation is Arabic, she cannot help inserting French words and phrases to impress others. She works as a secretary in a kindergarten school.

Kareema does not enjoy talking about her problems. Her approach to obstacles is direct: she knows that she must solve any problem herself because no one else will. For example, last year, when her son's teacher unjustly tried to fail him for the year, Kareema had the boy transferred to another school, where he took the year's exam and passed.

With regard to her husband, she does not generally have serious conflicts with him, but presently they are having a house built, and disagree on the speed of the project. Her husband is content to "sit back" and wait for the workers to finish at their own pace, so Kareema speaks to the workers herself, and has replaced the chief construction worker three times.

This forthright approach to solving her problems characterizes all aspects of Kareema's life. At home, she hired a maid to help with the housework when her daughters are in school. At work, she talks directly
to her supervisor and customers about disagreements when they arise. And out of concern for her health (she has a calcium deficiency) and the family's financial resources, she was sterilized after the birth of her third child.

Kareema is in good health. She takes calcium pills and watches her diet. Correspondingly, she has few physical complaints, and is not often anxious or depressed. Her only major difficulty occurred two years ago when she broke her leg. Because the doctor in Tunis did not set the leg correctly, she had to go to France and have the leg reset. In the meantime, Kareema's sister moved in with them and took care of the children, the maid came more frequently to clean, and Kareema took four months off from work.

In addition to the direct actions Kareema takes, she practices the five daily prayers, and visits the marabout. She has read about certain derwishes who are frauds, but she also knows people who have been helped by them. She is able to tolerate a certain ambiguity about their power, i.e. that not all are bogus, but neither are they all helpful. However, she has never been to see one.

Hanan.

Hanan is a tall, large-boned, 40-year-old woman with deep, dark eyes that show her pain. She is always subtly well-dressed, her eyebrows carefully plucked, her hair cut short- a quietly elegant woman. She carries herself with a remarkable dignity, and enjoys social interactions where she can ask about other peoples' lives. She attended school through the third grade in high school, but never learned French, and has never worked outside of her home. She lives with three of her four
children (who are in their early twenties) in a comfortable, three-bedroom house, with the amenities of a television, radio, modern furniture, and Tunisian rugs on the floor. Knick-knacks, books, and pictures of her dead family members are placed carefully on the coffeetables and dresser.

As much as Hanan enjoys listening to others, she is also willing to talk about her own personal tragedy, which dominates her life and overshadows her day-to-day problems. Five years ago, she was in a terrible car accident with four of her family members. Hanan was the only survivor: her husband, 7-month-old baby, mother-in-law, and brother-in-law were all killed. Hanan was injured badly. Her teeth were knocked out (she wears false ones now), she was temporarily blinded in one eye, and her pancreas had to be removed. She stayed in the hospital for one month. Immediately following the accident, she took one tranquilizer three times each day, but now she takes only one at night to help her sleep.

Of course, Hanan's children were also affected by this catastrophe, and even now, Hanan blames her youngest (age 20) son's failure at school on his confusion and pain over his father's death.

Hanan has every somatic and anxiety symptom mentioned to her. She experiences panic attacks (she calls them "shock"), which she knows she creates herself with her thoughts. Her heart pounds fiercely, she feels dizzy, can't breathe, and is afraid she is going to die. However, Hanan does not feel trapped, nor does she blame herself. She feels worthy, and never considers wanting to die. She has hopes for the future: that her new house will be finished, her children will succeed, and that she will
be able to go on the Haj. She is a deeply religious woman, and observes
the prayers, and visits the marabout, where she prays, drinks and washes
her legs in the water, and watches the tijania- a group of women who are
descendants of the marabout, and who play the drum and dance. (They
visit homes to chase away the jinn, too, but they have never been to
Hanan's house.) Hanan also takes advantage of her freedom by going to
the store or to the park by herself, when she feels badly. She is a
strong, independent woman, who relies heavily on her friends, family, and
God, to sustain her through the tremendous pain with which she has
learned to live.

Monia.

Monia is a petite, blond, 33-year-old woman, whose education and
intelligence set her apart from many of the women and men around her.
She has sad eyes that turn down on the sides, and a comfortable manner
that reveals her self-confidence. She speaks English fluently, with all
the mannerisms and argot of an American. But interestingly, these latter
behaviors are lost when she speaks her own language, Tunisian Arabic, and
even when she speaks French.

Monia's father died when she was nine years old. Subsequently, Monia
experienced problems in school, caused mainly by her own rebellion. She
learned to depend on herself, and committed herself to succeeding in her
studies. She received her high school diploma, then went on to the
university, which she quit after two years because she knew she could
obtain a well-paying job with her then present skills. She was quickly
employed by an American company in Tunis, and worked for several years
before marrying.
Monia was 27 years old when she met her husband (a commercial manager) in an office where they both were working, and when he proposed to her, she accepted. They have now been married for six years, have one 5-year-old daughter, and Monia is 6 months pregnant.

Monia has no difficulty speaking of her personal problems: she has thought them all through many times, and spent hours trying to figure out herself, her life, and the people closest to her. Her responses reflect her pensiveness—they are detailed, insightful, and painfully honest.

Monia attributes her relationship problems to her own independent character, which is generally an unacceptable way of being for a woman in Tunisian society. She argues with her husband when he leaves her at his parents' house then goes off with his friends. Her parents-in-law disapprove of her independent behavior. And Monia and her husband argue about their daughter—he gets angry with the girl for behavior that Monia considers normal for a 5-year-old. Recently, Monia has been feeling increasingly frustrated about this latter problem, and has decided to keep silent from now on, because he doesn't listen anyway, and her protests only result in a loud argument. Concomitantly, she has also decided to visit her parents-in-law in Sousse, and discuss their relationship with, and feelings about her.

Monia used to do the housework in addition to her outside work, and caring for her daughter. Her husband never helped her, and although he occasionally told her to just leave the housework undone, he became angry when she did. Three months ago, they hired a maid, who now lives with them in their new three-bedroom apartment. This has helped Monia enormously.
Monia enjoys her outside work. She likes working with Americans, and performing the variety of tasks involved in her job. She is a hard worker, and straightforward in confronting problems at work. Recently, when she was applying for her present job, her employer told the interviewer that she was "competent, but stubborn". When she learned about this, she went straight to the interviewer, talked with him, and gave him many other references to convince him that she is not stubborn. Consequently, the interviewer gave her the job.

In addition to her marital and family relationships, Monia's greatest problems have concerned contraception. She used the Pill during her first year of marriage, and ovules during the second year, when she became pregnant with her daughter. After the birth, she tried using the Pill again, but had to stop because of headaches, dizziness, and faintness. Subsequently, she had two abortions, then became pregnant with twins which she decided to keep. But during her sixth month, after a long hard day of work, she miscarried. This was a terrible blow for Monia, and the only way she could cope with it was by thinking of other worse things that could have happened (e.g. like losing her daughter), by returning to work immediately, and by becoming pregnant again right away.

Monia loves children, and would like to have three, if they can afford for her to work only half-time. But her family disagrees, with her husband telling her that they must stop after this one, and her mother (who has nine children) pressing her to have more. Monia tries to explain to her mother how times have changed, but her mother doesn't hear her.
Monia is healthy, and although her work sometimes makes her anxious, she is generally a calm person. But she is also depressed frequently. She often feels caught, sad, and low in energy. She worries a lot, and spends the rare time she has alone simply laying on her bed, staring at the ceiling, and thinking. She doesn't do the prayers, but she considers herself spiritual, and says the Shahada every night, (a statement made by Muslims that there is only one God, and Mohammed is his prophet.) She has vivid dreams that have so frequently predicted future events in her life, that she now believes firmly in them. But she is smart enough to know that not everyone would understand this part of herself, thus, she keeps her dreams to herself.

Mounira.

Mounira is 27 years old— a cheerful, outgoing young secretary who separated from her husband two years ago. She is pretty, and tan, with bright eyes, short brown hair cut in the latest style, and a curvy figure that she shows off with tightly fitting dresses. She likes to wear high heels, lots of jewelry and make-up, and red nailpolish, and enjoys the looks she gets from men because of her appearance. When asked by a male acquaintance how she likes being single, she laughingly replies, "I love it!"

Although Mounira met her husband outside of her family, she married him quickly because of family pressure: she is the oldest daughter, and her father was dying and wanted to see her married. Soon after the wedding, her husband began sleeping with other women, and lying to her, so Mounira consulted her mother and siblings (her father had died by then), and they encouraged her to divorce him. Although she had had one
miscarriage, she had taken the Pill without her husband's knowledge during most of the two years they lived together, and as such, never again became pregnant.

As if to make her case even clearer, Mounira's husband wrote a bad check, and was sentenced to prison for five years. Five months after he entered prison, she filed for the divorce. That was approximately two years ago, and her divorce will be final in less than one month.

Most of Mounira's problems are related to her marital status. Although the decision to divorce her husband was an embarrassing and painful one, she has recovered from it, and looks forward to remarrying. She considers herself very physically attractive, which she knows is the main thing men look for in a wife. But the problem is that some of her family members are still embarrassed about her divorce, and want to socially isolate her to keep people from gossiping about their family. Her sister thinks she is becoming a burden to the family, and is afraid that Mounira's divorce will influence her own fiance's decision to marry her. Concomitantly, their brother is very conservative, and has made a schedule for Mounira to follow, which assures that she will spend all of her time at work or at home.

Mounira is hurt by her family's reactions, but she understands. She doesn't talk to her sister about it, because she knows nothing would change. She is closer to her brother, whom she considers compassionate, and she often talks quietly with him. Sometimes she is able to convince him that she should be able to do what she wants (i.e. go out), but his concern for her and her family's reputation always prevents him from
supporting her wishes. Still, she manages to go out occasionally without
his knowledge.

Mounira enjoys her work, in fact, she couldn't tolerate having to
stay at home all day. She gets along well with her male employer, and
her female coworkers, with the exception of one of the latter, who tells
lies about her. Mounira ignores her, because she knows the woman has
"personal problems".

Mounira is in good health, but she calls her constitution "delicate",
and thus, never does anything physically strenuous. When she is very
ill, (the last time was four years ago, with a fever), she goes to the
doctor. During her periods, she drinks tisane (vervain), which she says
"warms the uterus", relaxes her, and decreases the pain. When her father
died two years ago, she felt "shocked", didn't speak to anyone, and
thought life was worthless, for many days. She cried and cried, but
despite her grief she never considered beating her thighs or scraping her
face. She is over her father's death now, though, and is usually in a
happy mood.

Moufida.

Moufida is 40 years old, has three children, and works as a sewing
teacher in a high school. Her husband is a school administrator.
Moufida is about 50 pounds overweight, and always looks tired because her
face is heavy with dark circles under her eyes. She wears red lipstick
and kohl on her eyes, a pearl necklace, and a red dress that is too small
for her. She appears ill at ease, and smiles rarely, but when she does, it
is a sweet smile.
Moufida doesn't like to talk about her problems, but she will if questioned. Last year, her mother died after being ill for two years with cancer. Moufida knew she was going to die, and tried to prepare herself psychologically (she also does the prayers), but the death was still terrible. She still gets tears in her eyes when she talks about it, and says "God gives patience".

Moufida's children are all grown - two in college and one in high school - so they are not problems for her. She has also raised a girl who is her maid, and she refers to her as her "daughter", but the girl was never educated, and is expected to do whatever Moufida tells her. Moufida doesn't seem to notice the inconsistency in this arrangement.

Moufida gets angry with her husband, but she never argues with him. She always holds her anger inside, and tries to cope by reciting the Quran, or crying, or sometimes, by sleeping alone. Her husband usually apologizes when she does the latter. One aspect of their relationship is especially disturbing to her. Although both of them work in the same place, and have the same responsibilities, Moufida must assume all of the responsibility for running the household too. Her husband has refused to help her ever since they were married. Although the maid helps her, Moufida still deeply resents the unfairness of the situation. But she can only keep silent about her feelings.

Moufida has many physical complaints: weakness, stomach aches, and so on. For the last four years, she has been having muscle soreness and pains, and believes she is developing rheumatism. She hasn't been to the doctor for that problem, but she did visit him for two others: a painless vaginal "infection", and extreme itchiness of her legs.
Moufida's births were all very difficult too, and she had to be anaesthetized by a doctor for each. Following the last, she took the Pill for 15 years, then stopped because she thought it might have been causing her muscle pains. (It obviously was not, as she still has the pains.) During these last few years, her husband ejaculates outside of her. She did become pregnant once, after her twelfth year on the Pill, but she aborted it. Neither she nor her husband want to have more children.

Badiaa.

Badiaa is a small, thin woman, with short dark hair she has tinted with henna. She wears tiny gold earrings, a ring, designer glasses, and a black flowered dress, but no make-up. She is 34 years old, attended university for three years, and works as a midwife. Her husband is a high school teacher, and their son and daughter are in elementary school.

Badiaa is noticeably nervous, irritable, and depressed, and her living situation explains why. Two months ago, her father died. Badiaa says she is still "shocked" by his death, but she cannot cry. She just feels very nervous whenever she looks at his picture hanging on the wall.

In addition, Badiaa works alternating day and night, 12-hour shifts at the hospital. She delivers too many babies during every shift, and as she explains, the women are always hysterical-screaming and yelling the entire time. Her employer is unreasonable, and once during Ramadan forced her to work a 24-hour shift. She and the other midwives have protested through their union, but the director has absolute authority over them.
Badiaa is also overworked at home. She cooks, cleans, and cares for the children herself, with occasional aid from a maid who is unreliable. Badiaa argues frequently with her husband, particularly when they go on a visit, and he leaves her with his parents then goes off with his friends. Sometimes he tries to change, but his new behavior never lasts. He never considers helping her with the housework.

Since her father's death Badiaa has developed a frightening illness. The lymph glands under her arms and in her groin are swollen and painful. She knows it is serious, and attributes the problem to her inability to cry since her father's death. Her doctor is still performing the test analyses to determine what is wrong. Badiaa is anxiously awaiting the results. And despite the extreme fatigue and psychological and physical pain she is enduring, she never considers wanting to die, because she knows her children love and need her.

Alia.

Alia is a sweet, 27-year-old young woman who works as a secretary for the same government office in which her husband works. She is thin and pretty, and her almost constant smile shows perfect white teeth. She wears a pink, flowered dress, and gold jewelry. She is shy, mostly from a lack of self-assurance, and has the mannerisms of a girl, rather than those of a woman.

Alia has been married for only one year. Her husband is a policeman, and the two of them live with his mother in her two-bedroom apartment. Alia likes her mother-in-law, and the two of them share the housework. Alia's husband does the shopping. There are no children yet, because
Alia has been taking the Pill, but they do plan to have two children, "later".

Alia and her husband never fight, but this is probably best explained by the short time they've been married, and Alia's preference for keeping silent when she disagrees with him (or anyone, for that matter). Their most recent disagreement was over an outfit she bought that he didn't want her to wear outside. She was able to change his mind by talking with him.

Similarly, at work, Alia has a satisfying relationship with her employer. Occasionally, when she suggests a better way to do something, but he doesn't listen, she just says nothing more, and tries to forget the conflict. This is one of her most commonly used methods for coping with any problem, because she believes that ignoring a problem reduces its significance, while getting upset makes it more important than it should be. But sometimes, she also visits her aunt to talk with her, when she feels very angry.

Alia is in good health. Although she had a stomach illness last winter, the doctor gave her medicine that cured the pain. Presently, she has few physical or psychological symptoms of sickness. She cries easily, but more as an outlet for frustration than as a problem in itself. Alia knows that her life is just beginning: she loves her new husband, and looks forward to having children, and to building their own home.

Zeynab.

Zeynab is a cheerful, plump, 32-year-old woman with three young children, and a secretarial job that she enjoys. She also enjoys her
life in general, which shows in her congenial social interactions and readiness for a good laugh whenever the opportunity arises.

Zeynab has many problems, but none she considers too big to handle. Presently, her 5-year-old son is giving her a hard time by refusing to eat, but she knows he'll grow out of it. She has a maid who watches the children during the day and who does the laundry, but Zeynab comes home every noon to cook lunch and nurse her 4-month-old daughter. Zeynab doesn't feel overworked, but she plans to take a contraceptive again when she stops nursing so that she won't become pregnant again. Although her pregnancy and birth were not exceptionally difficult, she did crave and eat coal during the nine months.

Zeynab is on good terms with her employer, but he does get mad when she is late for work, which is about two times each week. Her husband, a van driver, drops her off late. But Zeynab has been studying for her driver's license and will take the examination at the end of this week. As her husband drives his work van, and they have a car, she will be able to drive herself to work in the car every day.

Her only really serious problem is with her husband, and concerns the children. When their son won't eat, he hits the boy "hard enough to leave a mark". Zeynab hates for him to hit the child, and tries to talk to him alone, to convince him not to do it again. He usually listens to her, but he still hits the boy.

Zeynab is healthy, and gets ill with headaches mainly when she is angry, which is not often. To cope with her bad feelings, she listens to the radio, sleeps alone, does the housework, or cuddles her baby. She has friends she visits too, but not when she's feeling angry. In
general, Zeynab is happy with her life. She does not let her quotidienn
difficulties upset her, because if she did, she would be upset all the
time. She prefers to look for the humor in her problems, and to laugh
instead of cry.

Mouna.

Mouna is 35 years old, a calm, quiet woman who thoroughly enjoys her
children. She is well-fed, but not heavy, her skin freshly sugar-pasted
smooth. She has short dark hair, a gentle face, and an easy smile. She
wears a green sundress, pearl earrings, and a wedding ring on her finger.

Mouna attended school for five years, and works in a school, sewing
and doing various other tasks. Her husband is a hairdresser, and along
with their three children, they live in a small, three-bedroom
apartment. The rooms are sparsely furnished, the floors tile, and a tiny
water closet (toilet) is positioned next to the kitchen. The living room
contains a couch, table, and television.

Mouna's in-laws live far away, but her parents live next door. She
and her parents visit each other every day, although Mouna does not like
to tell them about her problems. Her mother helps her care for the
children, but Mouna still feels overworked with her home and outside
jobs. To make the load easier at home, she mentally divides her chores
into large and small, and does only one big task per day (e.g. washing
floors, or doing laundry). Although she does not mind working outside
the home, she would stop if they didn't need the money.

The birth of her youngest son a year ago was very difficult. She had
been taking the Pill after the first two were born, but stopped because
her doctor told her she had "high cholesterol in the blood". 
Subsequently, while using the Calendar, she became pregnant by accident with this last child. She didn't want the baby (although he is darling and obviously well-loved now), but she also couldn't abort it. She plans to return to the Calendar, because neither she nor her husband want more children. She doesn't seem worried about having another accidental pregnancy.

Mouna is content with her life and family. She has few physical complaints, with the exception of some facial discolorations she developed during her pregnancy, and an "allergy" she has had for nine years. She is using some creme that the doctor gave her for the spots, which is helping, but she has visited several specialists about her respiratory problem and none of them have helped. She believes the allergy is due to her work for many years knitting wool that was full of dust. She has allergic symptoms to dust and mold, and it is worse in the winter. She goes to the marabout, although she says "for a visit only". She also believes in the derwish, because she saw a hysterical woman cured by one once, but she would never go to one herself.

Naouel.

Naouel is 42 years old. She has a round face, pug nose, big, wide-set eyes that don't miss a thing, and high eyebrows that make her look constantly surprised. She likes to talk and laugh, and her dark skin and easy manner bring to mind a Bedouin woman.

Naouel sews at home for money, and she lives in a tidy little house with her husband (a watchman), six daughters, and one son. The central tile courtyard has five small rooms surrounding it, which serve as bedrooms, a living room (where the television is kept), and kitchen. A
narrow stairway leads to the roof where laundry is hung and couscous laid out to dry. The house smells like food and the jasmine flowers that grow in the courtyard, where everyone spends most of their time during good weather.

Her husband is a religious man, and thus very strict with Naouel and the girls. When she disagrees with him about their behavior, she usually tries to keep silent. But if he beats the children with a belt or rope, she can't help screaming at him. She used to hit them too when they were younger, but she doesn't anymore.

Despite her daughters' help with the housework, Naouel feels overworked. She has had several maids, but decided not to hire another after the last one left three years ago, because they were stealing, and cost too much. Her sewing work also presents problems, such as when a customer is dissatisfied with the time it takes her to finish an outfit, and leaves without paying her. For this, there is nothing she can do.

Naouel also has in-law problems. Her husband's brother constantly interferes with their lives, telling them what they should and should not do. Two years ago, they stopped talking to him completely.

Six years ago, Naouel's brother died. He was only 29 years old, and left a wife and baby. Naouel cried, beat her thighs, and scraped her face in grief.

Naouel has numerous aches and pains, but no major illnesses. She often feels sad, lonely, trapped, and low in energy. She says "Sometimes I feel the world is very narrow and tight around me." She blames herself frequently, and talks aloud to herself when she is ashamed of something
she has done. She gets headaches from her anger, and thinks something may be wrong with her mind. To cope with her anger, she drinks tea or coffee, cries, and recites the Quran. If she is very angry with her husband, she may sleep alone, for up to a week. But Naouel knows her family loves her, and her friends and relatives respect her. She considers herself a worthy person, and places all of her hopes in her children.

Hajer.

Hajer has a long, thin face that matches her tired, thin body. She has very short hair, narrowly plucked eyebrows, and slightly protruding teeth. She dresses fashionably, in gold jewelry and a wristwatch, a cotton dress, and red polish on her nails. She is 35 years old, has two daughters (ages 6 and 11), and works as a nurse.

Twelve years ago, Hajer met the man who is now her husband. As she tells the story now, she was young and naive, and this man was so nice to her that she could not refuse his marriage proposal. But after the wedding, his behavior changed radically.

Her husband began to put her down verbally, scream and yell at her, and physically beat her. He wanted her to quit her job to stay home and have babies, so he did things to cause trouble for her like coming to her workplace early and insisting that she leave with him, and calling her on the phone to bother her. She had worked at this hospital for 17 years, up until a year and a half ago, when her employer discussed the matter with her, and (generously) had her transferred (rather than fired) because of her husband.
Hajer has had only two children during their twelve years of marriage because she has taken the Pill, against her husband's wishes. Her family agrees with her decision not to have more children.

Hajer's mother has been dead for many years, but her father died only seven months ago. She was sorry, but he had been against the idea of divorce, so immediately following his death, she felt free to file a complaint to the court, which is now being formally considered as a divorce complaint. The judge has ruled that her husband must leave the house to her (legally), physically move to another location, and pay her child support. He has done none of these things. Hajer does not want to cause a loud fight by insisting because she would feel embarrassed about her neighbors hearing, but she is confident that when the divorce is final, he will leave.

Hajer has always been a nervous person, and even had panic attacks when she was a girl. But in addition to a high level of anxiety, she is now also experiencing many symptoms of depression, and physical ailments. She gets bad cramps in her legs, and is developing an ulcer. She sees a psychiatrist for her anxiety, and he gives her tranquilizers, which she takes three times a day. She doesn't like to tell her friends about her problems, but she does have several women who are very supportive of her emotionally. Hajer also smokes cigarettes when she is tense, which she says comforts her. When she is worried about something, she thinks about her mother, and imagines how her mother would help her solve the problem if she were still living.

Hajer suffers from headaches, and when her headache is due to anger, she also develops small swollen spots on her forehead. When anxious, her
eyes feel like they're burning, and she "sees stars". She feels trapped, lonely, worried, and ashamed. However, the only three symptoms of anxiety and depression that she does not experience give an idea why and how Hajer endures so much pain: she doesn't want to die; she feels hopeful about the future, that she will enjoy the rest of her life with her children, far away from her husband; and finally, she feels worthy as a person.

Wasilla.

Wasilla is 40 years old, approximately 50 pounds overweight, and noticeably controlled in her behavior. She is an exceptionally nervous woman, whose perfectly made-up face and coiffed hair, polished nails, designer glasses, and immaculate dress indicate her insecurities about her appearance. In addition, with family or strangers, she smokes a cigarette for the simultaneous effects of impressing people with her "modernity", and to calm her nerves.

Wasilla lives with her husband and five children in a four-room, European-style apartment. One room serves as a living room during the day, and a bedroom at night, and the dining table is squeezed into the hall. The toilet closet is in the kitchen, and one small sink is used for personal hygiene and food preparation. Wasilla's job at an industrial company, and her husband's job with an airline do not pay exceptionally poorly, but their family is large.

Wasilla's husband is a small, thin man, who smokes incessantly. He is good with the children, and treats Wasilla well. They have quarrels like everyone, but she never yells at her husband, and she never sleeps
alone. (She doesn't mention where she could possibly find room to sleep if she wanted to.)

Wasilla feels overworked by all of her duties. Her 11-year-old daughter has been giving her problems everyday, because the girl is jealous and very nervous— not unlike Wasilla. Wasilla is afraid the girl may not grow out of this behavior, and tries to help her by talking to her, and defending her before others. This daughter and the other help Wasilla with the housework, but the chores still seem unending. Wasilla does not mind her company work— in fact, she prefers working outside to staying at home.

Wasilla has not been pregnant for nine years. She has used the Pill and the IUD, but a year ago began using the Calendar. Her husband agrees with her about not having more children.

Wasilla is not a happy woman. She has no friends, and never visits her relatives. She says she has had an ulcer since she was 13 years old, and has taken Tagamet for the last 10 years. She has frequent headaches, many symptoms of anxiety and depression, with the exception of crying easily. She often feels a lump in her throat, but can't cry.

She thinks about wanting to die, but looks forward to the future, because she wants to build a house and to see her children succeed.

Nejab.

Nejab is 33 years old, has two small children, and works as a saleswoman in her father's make-up shop. She is a physically attractive woman— tan, with big dark eyes, greying hair she pulls back into a ponytail, and consciously feminine mannerisms. She wears lots of make-up and jewelry, a fashionable but comfortable dress, high heels, and red
nail polish. Her hands show traces of henna from a summer wedding celebration. She smokes to add to her modern appearance.

Nejab is somewhat cynical about life and people, but she enjoys talking about herself. During her seven years of marriage, (her husband is a history teacher), she has used the Pill and Calendar for contraception, the latter because the Pill gives her headaches and stomach pains. She doesn't want to have any more children. The two she has are darling, and well-cared for, but they require much energy from Nejab. Fortunately, she now has a maid to watch them while she works, and to help with the housework.

Nejab does not admit to having any serious problems with her husband, and socially, they seem to get along well. Her husband does not insist that she work outside the home, but she feels she must because they need the extra money. Their apartment is comfortable, with two bedrooms and a separate living/dining room, but Nejab wants to build a house.

Nejab is generally in good health, although she had a kidney infection last year. She is concerned about her appearance in relation to others, which explains her slightly nervous manner. But she has few symptoms of anxiety or depression. She does get headaches when she's angry, but not frequently. When she has a problem that bothers her, she visits her eldest sister, or talks to her husband, depending on what the problem is. In general, with the exception of her financial ambitions, she is satisfied with her life.

**Conclusion of Results Section 2**

This concludes the narrative description of the 45 women interviewed and their respective environments. Hopefully, this information has given
the reader an idea of the unique and common characteristics of each woman and each milieu, as such rich data provides the background from which a discussion and conclusions can be made about the results. The statistical analyses used to test the main questions of this study are presented next.

Section 3 The Effects of Modernization on Stressors, Problem Solving Efforts, and Psychopathological Symptoms, and the Relationship between these Variables

The first part of these analyses consisted of a multivariate analysis of variance (manova) of the effects of modernization (as the independent variable) on stressors, problem solving efforts, and each of the symptom categories (conceptualized as dependent variables), followed by one-way analyses of variance (anova's) for each dependent variable, and t-tests when findings were significant.

The second part of these analyses consisted of a canonical analysis of the relationship between modernization, stressors, and problem solving efforts together (conceptualized as independent variables) and somatization, anxiety, depression, and psychoticism together (as dependent variables).

For all of these analyses, modernization was operationally defined as the level of daily exposure to modern ideas and lifestyle, and categorized according to three levels: (1) rural, (2) village, and (3) urban habitation from childhood through adulthood. Within this definition is the assumption that the rural Bedouin environment provides the least exposure to modern ideas and lifestyles, with the village environment providing greater exposure than the rural environment, and
the urban environment of Tunis providing the greatest exposure of the three environments. More specifically, for the manova, modernization is treated as a categorical variable, but for the canonical analysis it is treated as a continuous variable. As the preceding section has attempted to show, the rural, village, and urban lifestyles are characterized by distinctly different levels of exposure to, and integration of, modern ideas, and technology, to a progressively greater extent from rural to village to urban environments.

Concomitantly, stressor level was operationally defined as the sum of the number of stressors reported as present by each woman, multiplied by its severity rating (major/minor; chronic/incident). (Due to varying levels of responses, in terms of health history, the health item was not included in the calculation of the stressor level.) Because the presence of a stressor in one area was not necessarily related to stressors in other areas, or to the overall level, the calculation of a coefficient for internal consistency was inappropriate.

The problem solving efforts score was operationally defined as the number of problem solving efforts reported by each woman in response to the problem solving efforts checklist, and included any additional strategies the woman mentioned for the problem solving efforts checklist. In order to assess the internal consistency of this measure, Cronbach's reliability coefficient was calculated. The coefficient for the problem solving efforts checklist was .58.

Finally, psychopathology was operationally defined as the number of reported symptoms in each of the four symptom category checklists: somatization, anxiety, depression, and psychoticism. The Cronbach's
reliability coefficients for these measures were .83 for the somatization score, .81 for the anxiety score, .58 for the depression score, and .24 for the psychoticism score. The lower coefficient for depression may be due to the less discretely defineable characteristics of this category across cultures (i.e. as depression has been found to be manifested differently in various cultures—see Marsella, 1979b). The very low reliability of the psychoticism measure probably reflects the reduction of symptoms in this category due to problems of conceptual equivalence. (The internal consistency reliability coefficients for the original Likert-type rated subscales of the SCL-90 are .86 for somatization, .85 for anxiety, .90 for depression, and .77 for psychoticism; Derogatis, Rickels, & Rock, 1976.)

To simplify the presentation of the results of the analyses, the results will be described in the order mentioned above.

The Effects of Modernization on Stressors, Problem Solving Efforts, and Symptoms: A MANOVA

The multivariate analysis of variance performed to test the significance of the effects of modernization on stressor level, problem solving efforts, and symptom categories showed a significant effect, according to the Wilk's Lambda Criterion, \( F(12,74) = 2.89, p < .01 \). Consequently, one-way analyses of variance were performed for the effects of modernization on stressors, problem solving efforts, and the symptom categories (see Tables 1 and 2 for means and standard deviations, and F-statistics, respectively).
Table 1

Mean Stressor level, Problem Solving Efforts, and Somatization, Anxiety, Depression, and Psychoticism Scores for Rural, Village, and Urban Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Stressor level</th>
<th>PS Efforts</th>
<th>Somatization</th>
<th>Anxiety</th>
<th>Depression</th>
<th>Psychoticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>16.40</td>
<td>12.47</td>
<td>7.33</td>
<td>6.47</td>
<td>8.60</td>
<td>1.60</td>
</tr>
<tr>
<td>SD</td>
<td>1.02</td>
<td>.64</td>
<td>.88</td>
<td>.76</td>
<td>.73</td>
<td>.19</td>
</tr>
<tr>
<td>Village</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13.93</td>
<td>7.93</td>
<td>7.27</td>
<td>4.40</td>
<td>6.20</td>
<td>1.33</td>
</tr>
<tr>
<td>SD</td>
<td>1.02</td>
<td>.64</td>
<td>.88</td>
<td>.76</td>
<td>.73</td>
<td>.19</td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>12.53</td>
<td>9.27</td>
<td>6.27</td>
<td>5.33</td>
<td>6.07</td>
<td>1.07</td>
</tr>
<tr>
<td>SD</td>
<td>1.02</td>
<td>.64</td>
<td>.88</td>
<td>.76</td>
<td>.73</td>
<td>.19</td>
</tr>
</tbody>
</table>

\( n = 15 \) for each group.
Table 2

Results of the Multivariate and One-way Analyses of Variance of the Effects of Modernization on Stressor level, Problem Solving Efforts, and Somatization, Anxiety, Depression, and Psychoticism Scores

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANOVA (Wilks Lambda)</td>
<td>2.89*</td>
<td>.01</td>
</tr>
<tr>
<td>ANOVAs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stressors</td>
<td>3.70*</td>
<td>.05</td>
</tr>
<tr>
<td>PS Efforts</td>
<td>13.17*</td>
<td>.001</td>
</tr>
<tr>
<td>Somatization</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.85</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>3.82*</td>
<td>.05</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>2.85</td>
<td></td>
</tr>
</tbody>
</table>
The Effects of Modernization on Stressors

The question for this analysis was:

(1) Does modernization significantly affect stressor levels?
(That is, do rural, village, and urban women differ markedly in the stressor levels they experience (i.e. number of stressors x severity)?)

An analysis of variance was performed for the effects of modernization in 3 levels (rural, village, and urban groups) on the continuous dependent variable stressor level, as operationally defined above. The results of this analysis showed a significant difference in stressor level between the three groups, $F(2,42) = 3.70, p<.05$.

Subsequent t-tests showed the rural group to have a significantly higher stressor level than the urban group, $t(42) = 3.80, p<.05$. The village stressor level mean was also higher than the urban group mean, and lower than the rural group mean, although not significantly so.

The Effects of Modernization on Problem Solving Efforts

The question for this analysis was:

(2) Does modernization significantly affect problem solving efforts?
(That is, do rural, village, and urban women differ markedly in the number of problem solving efforts they report using?)

An analysis of variance was performed for the effects of modernization in 3 levels (rural, village, and urban groups) on the continuous dependent variable problem solving efforts, as operationally defined by the summary score on the checklist. A significant difference was found between the three groups, $F(2,42) = 13.17, p<.001$. 
Subsequent t-tests showed that the rural group had a significantly higher problem solving efforts score than both the village group, $t(42) = 7.07, p<.001$, and the urban group, $t(42) = 4.99, p<.01$. The village group mean was the lowest of the three group means, but it was not significantly lower than the urban group mean.

**Frequency of specific problem solving efforts for rural, village, and urban groups.**

Table 3 provides the frequencies of each of the problem solving efforts listed in the checklist for the three groups, with asterisks next to those items with a difference of seven or more between two or more groups. The rural group reported drinking tea or coffee, stopping work, beating their thighs and scraping their faces, visiting the marabout, sleeping, going to their parents' house (a social protest as well as a way to gain support), and sleeping alone as problem solving efforts much more frequently than the village and/or urban groups. Both the rural and village groups reported hitting their children much more frequently than the urban women as a problem solving effort. Nearly all of the village group reported praying, whereas none of the rural women prayed, and a little over half of the urban women prayed. The urban women reported the greatest number of additional items, followed by the rural group, and finally, the village group.

The additional items mentioned by the urban women consisted of doing housework (6 women), ignoring their husbands (when it was a marital problem) (1), yelling at a neighbor (2), doing something fun (2), discussing the problem with their husbands (4), deliberately thinking about the problem and/or talking to themselves and/or trying to gain a
# Table 3

**Frequency of Problem Solving Efforts for Rural, Village, and Urban Groups**

<table>
<thead>
<tr>
<th>Group</th>
<th>Rural</th>
<th>Village</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CIGARETTE</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2. TEA/COFFEE*</td>
<td>9</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3. VISIT</td>
<td>10</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>4. SCREAM</td>
<td>5</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>5. CRY</td>
<td>14</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>6. FIGHT HUSBAND</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>7. HIT KIDS*</td>
<td>14</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>8. STOP WORK*</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>9. GO OUT</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10. PRAY*</td>
<td>0</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>11. BEAT THIGH*</td>
<td>12</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>12. MARABOUT*</td>
<td>15</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>13. CONSEQUENTLY ILL</td>
<td>14</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>14. PRETEND ILLNESS</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>15. DOCTOR</td>
<td>14</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>16. RADIO/TV</td>
<td>6</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>17. SLEEP*</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>18. PARENTS*</td>
<td>7</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>19. STOP EATING</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20. SLEEP ALONE*</td>
<td>12</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>21. SILENT</td>
<td>12</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>22. EAT COAL</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23. OTHER1-4*</td>
<td>8</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>

*a=n= 15 for each group.

*Difference between 2 or more groups is ≥ 7.*
different perspective (4), and reading (not the Quran) (2). The additional items for the rural women included cutting their foreheads (3), enduring the problem (1), doing housework (1), ignoring their husbands (1), yelling at a neighbor (1), and going to a court of law (1). Only three items were added by the village women: one who added doing housework, one who had sex with her husband to get something, and one who told her mother (who was living in the same house with her).

With regard to the possibility that rural and village women would score higher on this measure of problem solving efforts due to greater social support, it is interesting to note that twice as many rural women as urban women reported visiting a friend or relative for a problem, although the frequency for the village group was closer to that of the urban group. Concomitantly, the other major social support, going to one's parents house, was used more often by the rural and the village groups, with no urban women reporting the use of this strategy.

The Effects of Modernization on Somatization, Anxiety, Depression, and Psychoticism

The question for this analysis was:

(3) Does modernization significantly affect psychopathology, (i.e. somatization, anxiety, depression, and psychoticism)?
(That is, do rural, village, and urban women differ markedly in the number of symptoms they report experiencing?)

An analysis of variance of the effects of modernization on somatization found no significant differences between the three groups. Similarly, no significant differences were found between the three groups on anxiety and psychoticism.
However, for depression, an analysis of variance showed a significant difference between the three groups, $F(2,42) = 3.82$, $p<.05$. Specifically, the rural group scored significantly higher on depression than both the village group, $t(42) = 3.29$, $p<.05$, and the urban group, $t(42) = 3.47$, $p<.05$, although no significant differences were found between the village and urban groups.

**Frequency of the symptoms of somatization, anxiety, depression, and psychoticism for rural, village, and urban groups.**

Tables 4 and 5 show the frequencies of each of the symptoms included in the four symptom categories, with asterisks next to those symptoms with a difference of seven or more between two or more groups. In the somatization category the only such item was "trouble getting your breath", for which the rural and village group reported much higher frequencies than the urban group. The similarity in nearly all of the women in the three groups reporting headaches is worthy of note, as this symptom was often reported to be a result of anger.

In the anxiety category, only one difference of seven or more occurred. The urban group reported more tension than the village group. It is interesting to note that nearly all of the urban women reported feeling pushed.

In the depression category, the rural group more frequently reported thoughts of wanting to die, and feeling trapped, worried, and worthless, than the village and/or urban groups. The particularly low frequency of feeling trapped among the village group is especially interesting considering that this group experiences the tightest physical and social restrictions of the three groups. The urban group reported feeling sad
Table 4

Frequency of Somatization and Anxiety Symptoms for Rural, Village, and Urban Groups

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Groupa</th>
<th>Rural</th>
<th>Village</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEAD</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>FAINT</td>
<td>9</td>
<td>8</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>HEARTPAIN</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BACKPAIN</td>
<td>8</td>
<td>11</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>STOMACH</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>SORENESS</td>
<td>10</td>
<td>9</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>BREATHLESS*</td>
<td>10</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPELLS</td>
<td>12</td>
<td>13</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>NUMBNESS</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>THROATLUMP</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>WEAK</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>HEAVY</td>
<td>8</td>
<td>9</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>SOMATIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NERVOUS</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>TREMBLE</td>
<td>9</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>SCARED</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>HEARTPOUND</td>
<td>12</td>
<td>8</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>TENSE*</td>
<td>9</td>
<td>3</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>PANIC</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>RESTLESS</td>
<td>11</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>PUSHED</td>
<td>12</td>
<td>8</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>BLURRINESS</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DARKNESS</td>
<td>9</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ANXIETY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a=n= 15 for each group.

*Difference between 2 or more groups is > 7.
Table 5

Frequency of Depression, and Psychoticism Symptoms for Rural, Village, and Urban Groups

<table>
<thead>
<tr>
<th></th>
<th>Group&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Rural</th>
<th>Village</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEPRESSION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. SLOWED</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2. DIE*</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3. CRY</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>4. TRAPPED*</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>5. BLAME</td>
<td>13</td>
<td>9</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>6. LONELY</td>
<td>12</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>7. SAD*</td>
<td>9</td>
<td>4</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>8. WORRY*</td>
<td>14</td>
<td>6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>9. BORED</td>
<td>13</td>
<td>9</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>10. HOPELESS</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>11. WORTHLESS*</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>12. ASHAMED</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><strong>PSYCHOTICISM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. HEARVOICES</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2. THOUGHTCONTROL</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. FEAR GOD</td>
<td>14</td>
<td>15</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>4. LOSE MIND</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 15 for each group.

*Difference between 2 or more groups is ≥ 7.
more often than the village group. All three groups were markedly high on feeling ashamed.

In the psychoticism category, all three groups had a high frequency on the item of fearing God's punishment, and low frequencies on the other three items.

The Effects of Modernization, Coping and Stressor levels on Psychopathological Symptoms: A Canonical Analysis

The canonical analysis was an attempt to explain the relationship between psychopathological symptoms and modernization, problem solving efforts, and stressors. In this case, modernization with three levels was treated as a continuous variable, with ratings ranging from 1 for the least modernization to 3 for the greatest modernization. The modernization, problem solving efforts, and stressor variables were conceptualized as independent variables affecting the psychopathological symptoms as dependent variables. The research question was:

4) Do modernization, problem solving efforts, and stressor levels together significantly affect levels of somatization, anxiety, depression, and psychoticism together?

For the Wilk's Lambda test of significance, only the first canonical variate (which included all of the canonical pairs) was found to be significant, $F(12)= 2.50, p< .01$. Standardized canonical coefficients, canonical correlation coefficients ($r_c$), and the squared canonical correlation coefficients ($R^2_c$) were calculated for each variable (see Table 6). All of the canonical correlations were above .30, and thus important in an explanation of the model. The total amount of variance
Table 6

<table>
<thead>
<tr>
<th></th>
<th>Standardized</th>
<th>Canonical</th>
<th>Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modernization</td>
<td>-.16</td>
<td>-.39</td>
<td>.15</td>
</tr>
<tr>
<td>Stressors</td>
<td>.58</td>
<td>.56</td>
<td>.31</td>
</tr>
<tr>
<td>PS Efforts</td>
<td>.51</td>
<td>.54</td>
<td>.29</td>
</tr>
<tr>
<td>Somatization</td>
<td>-.05</td>
<td>.35</td>
<td>.12</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.19</td>
<td>.48</td>
<td>.23</td>
</tr>
<tr>
<td>Depression</td>
<td>.77</td>
<td>.51</td>
<td>.37</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>.32</td>
<td>.35</td>
<td>.12</td>
</tr>
</tbody>
</table>

Total = .84
in somatization, anxiety, depression, and psychoticism accounted for by the modernization, problem solving efforts and stressor level variables considered together was 84%, an exceptionally high figure which indicates the importance of these factors in understanding and explaining psychopathology in Tunisian women.

More specifically, the standardized canonical coefficients indicate that when modernization, stressor level, and problem solving efforts are considered together, with less modernization, higher stressor levels, and a greater number of these problem solving efforts reported, one finds a greater number of symptoms of anxiety, depression, and psychoticism, although fewer of somatization. However, as the low standardized canonical coefficient shows, the somatization variable does not add much to the model, relative to the other variables. Rather, as the squared canonical coefficients indicate, the most powerful independent variable appears to be stressor level, and the most important dependent variable depression, in an explanation of the relationship of modernization, stressor levels, and problem solving efforts with somatization, anxiety, depression, and psychoticism.

Because the point of a canonical analysis is to assess the relationship of a set of independent variables with a set of dependent variables, the most appropriate statement that can be made about the results of this analysis is that these two groups of variables appear to be strongly related, and that, when considering the psychopathological symptoms as dependent variables, the independent variables of modernization, stressor level, and number of reported problem solving
efforts together appear to be significantly related to the reported levels of somatization, anxiety, depression, and these four psychoticism symptoms taken together.
DISCUSSION

The results of the descriptive statistics, and the narrative description of each woman and the three environments, do not require a great deal of explanation, and as such, are integrated into the discussion of the results of the statistical analyses which do require interpretation and explanation. In order to clarify the discussion of these analyses, each analysis is discussed under a separate heading, and finally, conclusions are drawn from the integration and interpretation of the results of the descriptive statistics, the descriptive narrative, and the statistical analyses of the data.

The Effects of Modernization on Stressors

The results of the analysis of the first research question, which asked if modernization significantly affects the overall level of stressors experienced by women, did not show a consistent significant effect across the three groups. Although the types of stressors varied between the groups (e.g. more women reported contraception to be a problem in the rural group than in the urban group), the mean stressor level (consisting of the number of stressors acknowledged by a woman, and rated according to severity) for the rural group was significantly higher than for the urban group, but (insignificantly) higher than for the village group. Interestingly, the urban group had the lowest mean stressor level of the three groups.

The meaning of the rural group's significantly higher mean stressor level seems relatively straightforward. As the subject selection was described (see Method), the choice of rural participants whose socioeconomic level was comparable to that of the middle-class village
and urban participants was, practically speaking, impossible. (Admittedly, an ideal comparison would have involved the low socioeconomic groups in all three areas, but practical constraints prevented this.) As Katchadourian and Churchill (1973) discussed in their study of the relationship of education with prevalence of psychiatric illness, the difficulties involved in separating out variables such as social class, education, and income are numerous.

In the present study, socioeconomic level was inextricably linked to environment. That is, whereas extremely poor families can be found in all three areas of Tunisia (i.e. rural, village, and urban), rural families with enough money to leave the rural area invariably migrate to a village or to a city. Generally speaking, the village and city lifestyles are considered preferable to the harsher rural lifestyle. Thus, one does not commonly find middle-income or wealthy families living in the country, (although the latter rare families may maintain houses both on their farm land and in Tunis). As statistics provided by the Tunisian State Department (1976) show, "Since 1970, there has been a mass exodus from the farms to the cities. Now, cities account for more than half of the population" (p.234). As of 1971, this amounted to approximately 50.4% of the population being considered urban (Secretariat of State for Information, p.212). In sum, the generalization can safely be made that rural Bedouin settlements, by modern Tunisian (or Western) standards, are economically behind their village and urban counterparts.

As the narrative portion of this paper describes, the Bedouin settlement is a harsh environment. Scorching desert temperatures in the summer, driving rains that dissolve the one-room earthen houses and make
transport nearly impossible in the winter, multiple childbirths over which these women have little control, and low, if any, income provided by their husbands' work, all serve to oppress the Bedouin women. With regard to childbirth alone, Ammar's (1962) findings that over half of 67 psychotic Tunisian women had a relapse within one year due to another pregnancy, and most of the others, within two to three years, for the same reason, support the premise that multiple childbirths is exceptionally stressful for Tunisian women. If one does not consider these stressors alone excessive, the lack of alternatives for improving their situations added on to these factors is enough to explain why, despite the Tunisian taboo against suicide, 10 of the 15 Bedouin women interviewed said that they have thoughts of wanting to die.

In terms of the comparability of the rural group with the other two groups, the argument could be made that the rural stressors are due more to poverty than to a lack of modernization, and thus, the rural group should not be included in a comparison of the effects of three levels of modernization. Obviously, modernization cannot be equated with financial wealth, as there are many poor people (earning incomes below their nation's poverty line) who are living modern lifestyles (e.g. riding public transportation to an industrial workplace, living in high-rise apartments with indoor plumbing), in modern cities all over the world.

But clearly, modernization is tied to, and probably impossible to separate from (other than statistically) economic wealth. Recall that modernization has been defined herein as the primarily economic "process whereby developing societies acquire characteristics common to more developed societies" (Lerner, 1968, p. 392), including those unique
adaptations which occur during exposure to, and acquisition of, the developed country's ideas and ways. According to this definition, economic growth and capital are necessary for modernization to occur. Simply stated, it takes money to build public transportation, housing, and utilities, and on a more individual level, it takes money to improve a rural area, or what occurs more commonly, to move from a rural settlement to a village or city (the most popular direction of migration within Tunisia).

Thus, the difficulty involved in separating modernization from the economic conditions of a society, and especially, from the standard of living of the individual, forces the consideration of these two entities, that is, modernization, and economic status, together. Furthermore, economic growth is an integral part of modernization. For the investigation of rural areas and lifestyles in Tunisia, this means acknowledging that, whether poverty is a cause of, or a consequence of, a lack of modernization, the two variables are inextricably linked. Furthermore, the results of this section of the analysis indicate that the rural Tunisian lifestyle, characterized by a lack of modernization, is exceptionally harsh and full of severe stressors, as reported by these Bedouin women. These results are also in agreement with the author's narrative description of the Bedouin environment.

As mentioned previously, this study was able to make use of the greater accessibility of village and urban groups of relatively similar middle-class standards of living. Although occupations, (or rather, for women, occupational opportunities) are practically antithetical between Tunisian villages and cities, similar standards of living, relative to.
With regard to the lack of significant differences found between the rural and village groups, and between the village and urban groups, two explanations seem plausible. Although the village group mean was not found to be significantly different from either the rural or the urban mean, either (1) the village group's mean stressor level is more similar to that of the rural group than to that of the urban group, or (2) the village group's mean is more similar to that of the urban group.

The rural group's mean stressor level was over two standard deviations higher than that of the village group. Concomitantly, the village group mean was only slightly over one standard deviation higher than the urban group mean. The greater difference between the rural and village group means, than between the urban and village group means, suggests that the village group is more similar in terms of its stressor levels to the urban group than to the rural group. When the qualitative descriptions of the three environments and their stressors are also considered, the most plausible explanation seems to be that the rural group is higher in stressor levels than both the village and urban groups, with the latter two groups being more similar in their stressor levels.

Thus, with regard to the village and urban group stressor levels, the finding that there is no significant difference between these groups indicates that village and urban women of economically comparable groups experience similar levels of stressors. Concomitantly, the significantly different finding for the poorer rural group (from the urban group) indicates that the rural group's reported stressor levels are higher,
probably due to their greater poverty. These differences show the
importance of distinguishing specific aspects of the modernization
process, particularly socioeconomic differences, in the assessment of the
impact of modernization on stressors.

One final possibility which must be considered whenever self-report
measures are used is that the differences in scores may be due to
different inclinations towards reporting problems. With regard to
stressor levels, the researchers attempted to minimize this possibility
by explaining the confidentiality of responses, by double checking
stressor responses with the problems cited on the problem solving efforts
checklist and asking participants to clarify conflicting answers, and by
asking all participants about the same major categories of stressors to
decrease the likelihood that, for example, one woman might think of an
area that another woman might forget. Although the problems with
self-report measures can never be negated completely, this approach was
judged to be the most accurate and meaningful for this type of study (and
more appropriate than independent observer ratings). Furthermore, in
combination with the narrative section of the Results which described the
common and unique qualities of the three environments, both statistical
and literary views of the stressors these women experience are provided.
Finally, these two complementary approaches provide a broader perspective
on the research question, and the finding of a significantly higher mean
stressor level for the rural group is consistent with the description of
the harsher rural environment.
The Effects of Modernization on Problem Solving Efforts

The research question concerning the effects of modernization on problem solving efforts asked whether rural, village, and urban women report significantly different numbers of problem solving efforts. The results of the analyses conducted to answer this question yielded some interesting results, although not surprising when considered along with the qualitative information obtained for these three groups of women.

As it has been explained in the Method section of this paper, the original intention behind the problem solving efforts questionnaire was to provide a score that would reflect both the number of problem solving efforts employed, and their effectiveness, as an overall indication of problem solving efforts (similar to the stressor level variable representing the number of perceived stressors and their severity). However, the specific question used to measure the efficiency of each strategy ("Does it help?") proved to be difficult to answer with a "yes" or "no". That is, many women replied "sometimes", or "It helps for this problem, but not for another problem", or even, "It makes me feel better, but it doesn't solve the problem".

Because of these difficulties, the decision was made to assess problem solving efforts only in terms of the number acknowledged (including those added by the women to the checklist). Although this approach provides only a rough measure of problem solving efforts (as the modest reliability coefficient of .58 indicates), it does allow an assessment of the problem solving efforts available to, and used by, the women in these three environments. However, the lack of any consideration of the relative power of these strategies must be
remembered. That is, whereas one group may in reality be functioning less effectively than another group because the former's problem solving efforts are not working as well, the problem solving efforts scores may not reflect this. For example, the greater potency of one strategy may outweigh the effects of the use of several less effective problem solving strategies. With these cautions in mind, several tentative statements can be made regarding the problem solving efforts scores for the three groups.

First of all, the finding that the rural group scored significantly higher on problem solving efforts than both the village and urban groups must be explained. In addition, although the village and urban groups did not differ significantly, it is interesting to note that the urban group scored over two standard deviations higher than the village group. In other words, the village group had the lowest mean problem solving efforts score of the three groups. The explanation for these findings can again be found in the qualitative differences between the environments. The social restrictions of the village are more rigidly defined than those of both the rural and urban areas—although for different reasons.

In the rural area, the economic necessities of life override the sociological constraints and rules that are found in a larger, and economically stronger group such as the village. The need for the Bedouin women to perform laborious chores such as hauling water and firewood, (which require them to pass by their neighbors' houses), takes precedence over the desire of the men to hide their wives and daughters from the eyes of non-family neighbor men.
In addition, the high incidence of intermarriage results in nearly everyone being related, a situation that is evident in the existence of only five families in this Bedouin settlement of approximately 1200 individuals. The nearly complete lack of privacy in the rural desert environment, and the intimate knowledge of everyone's business, further decreases the likelihood of any uncondoned behavior occurring on the part of a rural Bedouin woman, which thus allows these women greater freedom, at least in terms of physical movement.

And finally, there is a greater acceptance of certain behaviors, including cartharsis, among the rural Bedouins, (and for them, by most Tunisians), as evidenced in their grief reaction of beating their thighs until they are bruised, and scraping their faces until they bleed. In sum, the significantly higher problem solving efforts mean found for the rural Bedouin women probably represents the wide range of problem solving efforts available to, and acceptable by (and for) them. Whether this greater number is more effective in helping them deal with their greater stressors is a different issue, and one which is addressed in the discussion of psychopathology.

In contrast to rural women, married village women are more constrained by unwritten social rules and taboos. As the descriptive statistics showed, none of the village women interviewed went outside unveiled. Many noted that they could not visit another woman (including, for some, their female family members) without their husbands' permission. Certain behaviors were simply not acceptable for them (in their opinions), as, for example, the behavior of sleeping alone (i.e. not in the same bed with their husbands). Only one woman said she used
the strategy of sleeping alone to cope with a problem (anger towards her husband, or to get something she wants), whereas all but three of the rural women reported using this strategy.

In addition to behavioral constraints, the village women were also more concerned about appearances than were the Bedouin women. None of the village women expressed grief through the beating and scraping of their thighs and face. As several women put it, with a hint of superiority in their voices, "We don't do that here". Similarly, only four admitted screaming in anger or about a problem, and all but two said that they use the strategy of "keeping silent" to cope with their husbands' angry outbursts.

The urban group reported a greater number of problem solving efforts than the village group, as one would expect considering the former group's less restricted lifestyle. The urban women did not report needing their husbands' permission to visit a female friend, family member, the marabout (there are marabouts in Tunis), or the doctor. They were literate, and thus could read the Quran (or secular material) as a way of dealing with frustration and disappointment. A few even reported smoking cigarettes to decrease their feelings of anxiety- an activity that elicited gasps of horror from the rural and village women at the mere mention of the possibility. In addition, the more cognitive items of thinking about a problem, talking to oneself, and trying to gain a different perspective on the problem added by the urban women may indicate their more cognitive orientation to problem solving. The addition of the item on discussing the problem with one's husband...
probably reflects the qualitative differences in the marital relationship between the urban group, and the village and rural groups.

Unlike the rural women, the urban group resembled the village group in their concern for appearances. This concern was obvious on an external level, as manifested in the immaculate make-up, coiffed hair, and dress of several of the urban women during the interviews. It was also apparent in their reports of the problem solving efforts they did not use, or that were used by only a few women. Of the 15 urban women, 13 reported never having beaten their thighs nor scraped their faces in grief, and 14 said they never stopped doing the housework to cope with a problem. Although the urban women interviewed were not restricted from going out of their homes, none of them reported going to their parents' house when they had a problem, and only one reported "going out alone" (e.g. for a walk, or to the park, without a man) as ways of solving a problem.

A note should be made here that the solution of going to one's parents' house is simultaneously a very powerful social protest and way of gaining support. That is, in the rural settlement and village, it is quite embarrassing for a man when his wife leaves him, and a women can frequently use this strategy to her advantage. However, in the city, where communities are not as closely knit, and extended families may not even live near each other, this ploy is not as important nor as effective. Concomitantly, praying, which was practiced by nearly all of the village women, but by none of the rural women, may be a powerful problem solving effort which outweighs in its general efficiency for a variety of problems, the effects of several more problem-specific strategies.
In sum, the middle problem solving efforts mean of the urban group is probably also a reflection of the mixture of problem solving efforts uniquely available and acceptable in the urban setting, and the social concern for appearance that restricts the acceptability of certain other problem solving efforts.

Two final criticisms must be considered concerning the reliability of the problem solving efforts scale. Because this was not a comprehensive scale (as indicated by a number of items added by the women) it is possible that the scale is biased towards more traditional ways of problem solving. That is, perhaps more of the problem solving efforts listed are common within the traditional lifestyle than in the more modern lifestyle. Such a bias would explain why the rural group scored higher than the other groups, however, it would not explain why the urban group scored higher (albeit insignificantly) than the village group. The village group was certainly more traditional than the urban group, but their problem solving efforts mean was lower than that of the urban group. This point seems to contradict the legitimacy of this criticism.

The other potential problem with this scale is one which has already been discussed for the stressors scale- the subjectivity of self-reports. The possibility exists that the rural women may be more aware of their own use of problem solving efforts, or more inclined to say that they use a particular strategy when they don't. However, during the interviews, the rural women were not more verbal nor more agreeable than the village and urban women, they did not appear particularly concerned about confidentiality (which should be linked to more truthful
answers), and the interviews were also conducted privately (without spouses, family members, or friends). Furthermore, the checklist required more than a simple yes-no answer by asking each woman to specify a problem for every effort for which she responded "yes", and to tell whether the effort helped that problem. This required a more carefully considered answer, and increased the likelihood of greater accuracy.

In conclusion of this discussion of the effects of modernization on problem solving efforts, the results most likely reflect exactly what they measure within the confines of this relatively narrow scale. That is, rural women make use of the greatest number of discrete problem solving efforts in conjunction with their greater stressor levels and the greater acceptance of certain behaviors for and by them, followed by urban women who are somewhat more restricted in the types of problem solving strategies they can use and appear to have lower stressor levels as indicated by the stressors measure, and finally, by village women, for whom the least number of problem solving efforts are available and acceptable. Considering the qualitative description of the environments in the narrative section of the Results, the lack of a significant difference between the village and urban groups seems most likely due to the insensitivity of the instrument used to measure problem solving efforts, although it must be acknowledged that this lack of significance may truly reflect no significant difference on the number of problem solving efforts used between the village and urban groups. Certainly, the inability of this instrument to assess the relative efficiency of each problem solving effort is a serious deficit.
The Effects of Modernization on Psychopathology

In the previously reviewed studies on the effects of modernization in the Arab world on psychopathology, psychopathology has typically been defined as psychiatric hospitalization. The advantages to this approach include the availability of large sample sizes, and the opportunity to compare a variety of psychiatric disorders.

The major disadvantage is that of separating out the effects of modernization alone on hospitalization rates, from the effects of the availability of a hospital, and further, the effects of the acceptability of hospitalization. Practically speaking, this is extremely difficult to accomplish in an area such as Tunisia where medical care has been accessible to most Tunisians for only the last few decades (and even now, for various reasons, is still not accessible for many women). Concomitantly, a second disadvantage involves the definition of psychological distress or disorders as hospitalization. These are not synonymous terms—especially in areas where hospitalization is considered a last resort for a family, and not even that, in some families.

The investigation of psychopathological symptoms in a normal population, therefore, can fill an important gap in the current knowledge of the effects of modernization on psychological health. The use of a symptom checklist gives a more individual-level look into the effects of modernization on psychological well-being, which this study has attempted to accomplish.

The research question concerning psychopathology asked whether the rural, village, and urban groups differ significantly on the number of symptoms they report. Rather than using a combined score of several
types of symptoms— an approach that overlooks the variation in the symptom manifestations of distress in different groups— the symptom categories of somatization, anxiety, depression, and psychoticism were used in order to more precisely measure any differences in the expression of psychopathology. As Marsella (1979a) has noted, "Regardless of the research strategy used, the results demonstrate that cultures differ in the manifestation of mental disorders" (p.250). Therefore, to understand how modernization affects specific symptom clusters, the effects of modernization on each symptom category was tested.

The results of these analyses did in fact show differences in symptom expression between the three groups. Although somatization, anxiety, and psychoticism varied little across the three groups, depression symptom levels were significantly different between the groups experiencing different levels of modernization.

**Somatization**

First of all, the finding that somatization was similar in the three groups must be interpreted. As the literature discussed herein has shown, somatization is a common manifestation of psychological conflict in traditional cultures, including Arab culture. Somatization as a manifestation of psychological disturbance has been found to be less common in developed Western nations such as the United States (e.g., Kleinman, 1977). However, the rural, village, and urban groups in this study were all from one developing country. Thus, although one would expect the urban group, with its higher level of daily exposure to modern ideas and lifestyles, to be lower on somatic symptoms than the other two groups which have experienced less modernization, one would not expect
these differences to be striking, and this is exactly how the results appear, in terms of the group somatization means.

Somatization in Arab women has been discussed in the introduction of this paper, and as Racy (1980) describes, provides a socially accepted outlet through which Arab women can gain sympathy and care. In urban areas where women can visit a doctor independently, one would expect such manifestations of distress to be lower. Interestingly, the somatization mean for the urban group is slightly over one standard deviation below both of the other groups' means, the rural and village means being nearly identical.

Still, such small differences are not statistically significant, and the possibility exists that there truly is no significant effect of modernization on somatization in women within one developing country, as the statistical analyses show. The relatively high reliability coefficient for this category indicates that the measure itself was a consistent one. Furthermore, this explanation is partially supported by the findings of Inkeles and Smith (1970) who found no consistent relationship between psychosomatic symptom scores and modernization, although their subjects were all employed males, and differences were measured between subjects, that is, for subjects' migration from rural to urban areas (rather than between a rural group and an urban group).

One last note should be made with regard to the types of somatic symptoms manifested in these women, mainly because it is so striking. Headaches were reported by 43 of the total sample of 45 woman, and in many cases these headaches were incapacitating. The occurrence of this problem across the three groups, and so consistently linked with anger
and frustration, indicates an important method by which Tunisian women
deal with and/or express psychological conflict.

In sum, all that can be said of the results on somatization is that
the mean somatic symptom scores for the three groups point to a possible
decreasing effect of modernization on somatic symptoms, but that this is
only the basis for further investigations of this subject— not for making
any firm conclusions.

**Anxiety**

Although no significant differences were found between the three
groups on anxiety symptoms, the mean rural anxiety score was slightly
over one standard deviation higher than the urban mean, and the urban
mean was slightly over one standard deviation higher than the village
mean. That is, the rural group had the highest mean anxiety score, and
the village group had the lowest mean anxiety score. Either, as the
statistical analyses show, there are no significant differences between
the groups on anxiety, or there are significant differences (as the means
suggest) but the sample size was too small to distinguish this difference.

The latter explanation seems plausible when considered along with the
qualitative information, and the results found in prior studies of
increased psychiatric disturbance with modernization (e.g. Ammar, 1979,
reviewed by Muller, 1983). With regard to the qualitative data, the
worries and higher stressor levels associated with the rural women's
poverty would certainly explain why they might experience the greatest
number of anxiety symptoms.

When one considers only the economically comparable village and urban
groups, it is apparent that the urban women generally had a greater
number and a wider range of personal responsibilities than those found among the village women. Not only did the urban women have the responsibility of housework, food preparation, and child care, but most were also at least partially responsible for the household finances. That is, 12 worked outside of the home, and of the 3 women who did not, one was a widow and thus responsible for managing her own finances, and another maintained a sewing business in her home, which contributed to the family's income. Interestingly, 12 of the urban women reported feeling tension, and 14 said they felt pushed; (3 and 8 village women reported these symptoms, respectively).

In contrast, the village women's responsibilities were much fewer. They worked only within the home, and did not have any outside responsibilities, including shopping, which their husbands or sons did for them. As several women replied when asked if they felt hopeless about the future, "I don't think about the future. That's my husband's problem."

Obviously, the step equating responsibilities with stressors must be made here in order to hypothesize that the urban women's greater responsibilities (than the village women's) yielded greater anxiety. In any case, these greater responsibilities, if perceived as problematic, would have been included in the assessment of stressors. However, according to the statistical tests, the two were not significantly different on stressor levels. Thus, the argument that the urban women experienced greater anxiety levels than the village women experienced, but that the sample was not large enough to permit these differences to be measured seems less legitimate. The high reliability coefficient for
the anxiety measure adds to the probability that the lack of significant differences between the three groups is simply due to a lack of significant differences.

**Depression**

For the depression category, the rural group scored significantly higher than both the village and urban groups. Hereagain, the most plausible explanation for this finding is that their greater number of depressive symptoms is due to their exceptionally high stressor levels due to extreme poverty, although this can not be stated conclusively because the rural group differed from the other groups on both level of modernization and socioeconomic status. The higher depression mean could be due to poverty alone, or to a lack of modernization alone, or, what is most likely, to the concomitant effects of poverty and a lack of modernization.

What is particularly interesting about these results is that the rural group, with its higher levels of depressive symptomatology (but not of the other types of symptoms), also reported higher stressor levels. This point raises the possibility that depression may be a better indicator of stressor levels in Tunisian women, or that their stress is more often manifested in depressive symptoms than in somatic, anxious, or psychotic symptoms. In addition, the finding seems to decrease the likelihood that the rural group's responses were due to a greater readiness to report a symptom (i.e. as they did not score higher than the other groups on all of the symptom categories).

The results indicate that when poverty is an integral part of an environment characterized by a lack of modernization (and possibly even
potentiating the negative effects of stressors), depression does appear to be more strongly associated (than somatization, anxiety, or psychoticism) with such an environment (than with more modernized middle-class environments). Furthermore, although the rural group reported using the largest number of problem solving efforts, it appears from their higher mean depression score, that these efforts are not especially effective in preventing the harmful psychological and physical effects of the severe stressors these rural women endure.

The lack of any significant difference between the village and urban groups on depression, and the nearly identical value of these means show a lack of an effect of modernization on depressive symptom expression among Tunisian women of similar economic backgrounds. Although differences in the expression and incidence of depression have been reported across different cultures experiencing different degrees of modernization (see Marsella, 1979b), the present results show no substantial effect between groups of the same culture and economic status. These findings conflict somewhat with those of Ammar et al. (1981), who have reported an increase in the number of hospitalizations for depressive disorders among Tunisians since 1956, however, their findings were based on the definition of depressive disorders as hospitalization rates (the problems of which have already been discussed) and on considering men and women together.

The relatively more modest reliability coefficient obtained for the depression measure must be mentioned here, as its moderate internal consistency should be refined for future work with female Arab populations.
In summary, the significantly higher depression mean for the rural group than for the village and urban groups points to a significant negative relationship between modernization and depression when the concomitant effects of socioeconomic status and modernization are not separated. That is, when poverty accompanies a lack of modernization (which is commonly the case in rural Tunisia), higher levels of modernization as found in the village and Tunis are linked with lower levels of depression. But when only village and urban groups of similar middle-class socioeconomic levels are compared, depressive symptom levels do not seem to differ significantly between village and urban women experiencing different levels of modernization.

**Psychoticism**

The last category was included as a measure of psychotic symptoms. No psychotic women were included in the study, thus, this category served only to identify the occurrence of these particular psychotic symptoms in the three groups of women. As mentioned in the Method section of this paper, six of the items were omitted as inappropriate or lacking conceptual equivalents in the Tunisian language. For example, the male Tunisian researcher had difficulty translating in a meaningful way the phrase, "Have you had the idea that someone else can control your thoughts?". Similarly, the female Tunisian researcher (who has never lived outside of Tunisia) had difficulty understanding the question.

It is interesting to note that the SCL-90 psychoticism symptoms, with the exception of one on sexuality, are relatively cognitive and abstract, and probably reflect the more cognitive manifestations of psychiatric disturbance found in Western psychiatric patients. Furthermore, as only
four symptoms are included in this category, the reliability of the measure is low, and as such, even if a significant difference had been found between groups, it would say nothing about the incidence of psychosis in any of the groups. However, the rural group's mean score, which is over two standard deviations higher than that of the urban group, and over one standard deviation higher than that of the village group, may reflect the greater stressor levels found for the rural group, and the greater acceptance by the rural women of behaviors considered unacceptable by the middle-class village and urban women.

The Effects of Modernization, Problem Solving Efforts, and Stressors on Somatization, Anxiety, Depression, and Psychoticism

As the introductory portion of this paper discussed, one of the purposes of this study was to investigate the effects of modernization on psychopathology, concomitant with the effects of coping and stressors. The question was asked whether modernization, stressor level, and the number of reported problem solving efforts significantly affect psychopathology. The finding that these three factors explained approximately 84% of the variance in symptoms shows that a significant portion of the variation in psychopathology can be understood by the knowledge of one's living situation in terms of the degree of modernization experienced, stressor level, and the number of specific problem solving efforts recognized and utilized by the individual. When one considers that the problem solving efforts measure was a relatively rough one, and that both the problem solving efforts and stressors measures had not been used in any previous research, these results seem even more significant.
This analysis shows that a significant amount of the variance in psychopathology can be explained by the degree of modernization, stressor level, and the number of problem solving efforts acceptable to and used by these Tunisian women. More specifically, with greater modernization one finds lower stressor levels, fewer of these problem solving efforts employed, and fewer anxious, depressive, and psychotic symptoms, although a possible increase in somatic symptoms. This latter finding in the canonical analysis is contradicted by the group somatization means, which are nearly identical for the rural and village group, and approximately one standard deviation higher than that of the urban group. But the small standardized canonical coefficient for the somatization variable indicates its relative lack of importance in an explanation of the variance in psychopathology due to modernization, and stressor and problem solving efforts levels.

The previous findings on the specific effects of modernization help to clarify the results of this canonical analysis, as the latter does not separate the much poorer rural group in its assessment of the relationships between modernization, stressors, problem solving efforts, and psychopathology. That is, when socioeconomic status is considered an inseparable part of modernization, a lower level of modernization and its concomitant poverty are associated with significantly higher stressor levels, a significantly greater reported number of employed problem solving efforts, a significantly higher number of depressive symptoms, and (insignificantly) higher mean somatization, anxiety, and psychoticism scores.
However, when poverty, as an element of lower levels of modernization is excluded for statistical analyses, and only the economically similar village and urban groups are compared, the results show no significant effects of modernization on stressor levels, problem solving efforts, or psychopathology. Thus, the canonical finding that higher stressor levels and a greater number of reported problem solving efforts accompany a lack of modernization is most likely accounted for by the inclusion of the rural group with its significantly higher stressor level, number of reported problem solving efforts, and depression levels.

These findings of greater psychological disturbance in the rural group are contradicted by the Tunisian research by Ammar and his colleagues which has found an increase in psychiatric hospitalization rates for men and women together since Independence (which has been accompanied by increasing urbanization and modernization), although the problems with those studies have been mentioned. These current results also conflict with much of the research on this topic, for Arab and non-Arab groups described in the literature review of this paper, which has generally conceptualized modernization as a major stressor which leads to greater psychiatric disturbance. Although none of these has addressed the specific question of how poverty alone affects stressor levels, problem solving efforts, and psychopathology, Katchdourian and Churchill (1969; 1973) found a much higher hospital admission rate for psychotics of the lower class than for those of other classes.

Concomitantly, several studies support the finding of no significant differences between the economically similar village and urban groups. The research conducted in six countries by Inkeles and Smith (1970),
although it involved only employed males, found no significant effect of modernization on psychosomatic symptoms. In Egypt, El-Fatatry et al. (1980) found no consistent relationship between education and psychiatric disorder (education being a correlate of modernization in this case), and Okasha and Ashour (1981) found that crowding was not a major factor in the initiation or maintenance of anxiety. In Kuwait, Kline (1963) wrote that the incidence of psychiatric disorder in one hospital did not appear to differ significantly from that of the Western world, and Parhad (1965) noted that based on gender differences in hospital admissions, social mobility was affecting Kuwaiti men more than women. But these studies provide only partial support for the findings presented for the present study, largely because none of them addresses the specific topic of the effects of modernization on non-hospitalized women in terms of symptoms rather than in terms of psychiatric hospitalization.
CONCLUSIONS

Based on the preceding data and analyses, two conclusions about the effects of modernization, stressors, and problem solving efforts on the manifestation of psychopathological symptoms in Tunisian women can be tentatively made.

The first conclusion is that if poverty is considered an integral part of the lack of modernization in rural Tunisian areas (which it is, for Tunisian rural Bedouins), then a low level of modernization appears to be associated with higher stressor levels, a greater self-reported number of discretely measurable problem solving efforts employed (as measured by this scale), and a greater number of reported depressive symptoms. Concomitantly, the results point to a possible decrease in somatic, psychotic, and anxious symptoms with a higher level of modernization such as those levels found in the village and urban areas (although the anxiety mean is slightly higher for the village group than for the urban group), but these are not statistically significant findings.

No causal statements can be made about these results, but considering the lack of significant differences between village and urban groups, which the descriptive section of the results showed to be very different in terms of exposure to and integration of modernizing influences, the higher stressor and symptom levels for the rural group are most likely due to the poverty which is concomitant with the lack of modernization in this environment. Similarly, the greater number of problem solving efforts is probably attributable to the wider range of behaviors permitted to these women because of their poverty.
Despite the greater number of problem solving efforts reported by the rural women, the relative power of these efforts was not assessed. The results seem to indicate, though, that the higher stressor levels which these women experience are not substantially mediated by their increased number of problem solving efforts, and thus, that these stressors result in a significantly greater number of depressive symptoms. Certainly, the investigation of problem solving efforts and their effectiveness must be explored in greater detail in order to understand how problem solving efforts relate specifically to stressor levels and symptoms.

The second conclusion which can be drawn from the results is that if one chooses to consider poverty apart from modernization, and compare only a group experiencing a lesser degree of modernization (i.e. the village) with a group of a similar living standard experiencing a greater degree of modernization (i.e. the city), then modernization is not associated with any significant differences in stressor level, number of problem solving efforts used, or number of somatic, anxious, depressive, or (the four) psychotic symptoms experienced. However, the urban group's lower mean stressor level, greater mean number of reported problem solving efforts used, and lower mean somatization score point to possibly beneficial effects of modernization, although the urban group's higher mean anxiety score (than that of the village group) indicates a possible negative effect of modernization. Or, these latter insignificant differences in symptom expression may simply reflect different manifestations of psychopathology. Whatever the case, additional research on this question using a larger sample size would be helpful in substantiating or disconfirming these results.
The qualitative data and quantitative analyses presented here have shown that modernization affects the types and levels of perceived stressors, the number and types of problem solving efforts employed and reported by Tunisian women (as measured herein), and depressive symptoms. Concomitantly, the interactional model which was described as the conceptual basis for investigating the variables of interest states that stressors and coping affect each other, which in turn affects the manifestation of stress states in psychopathology.

With regard to the present study and its fit with the interactional model, the weak link in the fit is the coping or problem solving dimension. The difficulties involved in developing the problem solving instrument and the fallibility of the instrument itself have already been discussed. Before the interactional model can be validated, more reliable measures of coping must be developed. Furthermore, these measures must be practical to administer and appropriate for illiterate, non-Western populations— a difficult task at best.

The unique aspect of the findings of this study with regard to the interactional model is the conceptualization of modernization as a distinct influence which affects stressors and problem solving efforts. In the literature review it was discussed how prior studies have frequently considered modernization to be a stressor in itself. However, the results herein did not find this to be the case. The argument could even be made that modernization as it affects women may be conceptualized as belonging more in the coping or support domain. But given the findings that modernization has a significant main effect on stressor level, and on the number of problem solving efforts and depressive
symptoms reported (when the rural group with its different socioeconomic status is included), modernization is probably best conceptualized as a collection of variables in itself, which may consist of certain stressors, but also of certain supports, and as such, affects stressors, problem solving efforts, and psychopathology directly (which this study has shown), and which also interacts with stressors and problem solving efforts to affect psychopathology indirectly.

In a more general way, these findings support the view that a certain amount of modernization, when it includes improved economic conditions, is more beneficial to women than almost none at all. Certainly, this is a point in favor of modernization programs which include women. The results of planned social changes in Tunisia have already been mentioned (e.g. education for women, equal inheritance, the right to contraceptives and abortion, and the right to choose a marriage partner and to divorce their husbands).

As is frequently the case, the legal statutes have preceded the widespread adoption of these changes, but all of the women interviewed in this study expressed a positive attitude towards one or more of the above concomitants of modernization. Whether they had children or not, they were in favor of their children attending school. Similarly, the beneficial impact of contraceptives and available abortion was apparent across the three groups. And although it could be argued that the right to divorce creates additional stress for women, the two women in this study who were enacting divorce procedures preferred being divorced to living with their husbands. In sum, the village and urban women experiencing the effects of modernization were generally very positive.
about the changes in their lives. And the Bedouin women, who experienced few direct effects of modernization, were eager to obtain governmental funding to build a stone house, to educate their children, and to obtain contraceptives, all of which can be considered aspects of the modernization process.

These women's attitudes towards modernization have been mentioned here because attitudes towards and feelings about modernization will probably greatly influence the extent to which such programs are successful and helpful. Generally speaking, the attitude towards modernization among Tunisians seems to be a positive one, based on the information given by the interviewed women, and the more informal conversations which the primary and assistant researchers had with numerous Tunisian men, women, and teenagers. This positive attitude towards change is greatly easing the pain of social change for many Tunisians, although at the same time the continuing importance of cultural and religious traditions is being observed by many.

An important question remains to be addressed, and that is, "How does this study and its findings relate to the condition of women in other Arab and non-Arab developing nations, and how can this information be used to improve their situations?" This investigation was conducted in only one Arab nation, with a relatively small sample, and as such, does not necessarily apply to women of other cultures. However, psychological research on women experiencing the effects of modernization in developing countries is presently quite sparse, particularly studies of Arab women, and this project can be seen as one of the first of such endeavors. The results seem to show the positive side of modernization (or at least, a
lack of significant negative effects) with regard to women in one developing country, particularly for those of a relatively middle socioeconomic status, and concomitantly point to the importance of socioeconomic status in outlining and assessing the impact of tradition and modernization on women. It is hoped that this investigation will also contribute to the growing awareness of the importance of mental health in developing countries in general. The mental health concern is especially important for women who exercise the responsibilities of child-rearing and thus play a powerful role in the development of future generations.

This study, which was conceptualized as exploratory, does not offer any definitive answers. In fact, it poses more questions than it answers. Chief among the questions for future research is, "How are women being affected by modernization on other types of psychopathology, for example, obsessive-compulsive behaviors, hostility, or paranoia, and on other dimensions?" These other dimensions include life expectations, divorce initiated by women, alternative lifestyles, self-concept, family adjustment, and child-rearing.

Another question which needs to be clarified asks "What are the differential effects of modernization on various socioeconomic groups of women?" More precisely, "What are the effects of different levels of modernization on one socioeconomic group, and what are the effects of the same level of modernization on different socioeconomic groups?" Perhaps, for example, modernization may be consistently more stressful for lower socioeconomic groups than for higher socioeconomic groups, chiefly because of the former group's poverty. Studies of women who migrate from
a rural or village area to the city would also be helpful in refining the
definition of the effects of modernization on women.

Concomitantly, the closely related area of inquiry concerning social
adaptation and coping can yield valuable information for easing the
inevitable changes that occur with modernization. If we can discover how
those optimally functioning and satisfied individuals are adapting to the
changes in their lives, we may be able to transfer this information to
less well-functioning groups and thus improve standards of living
elsewhere. One particularly interesting area for future work is the role
played by religion as a coping mechanism in developing countries.

As Daniel Lerner (1968) has noted, the developing nations are
attempting via planned social change to effect accomplishments and living
standards in a few decades which took the developed Western nations
centuries of haphazard trial and error learning to attain. Tunisia is
one of these countries which has made tremendous gains in improving the
living conditions for large groups of its people, and particularly for
many women, in a relatively short period of time. It is hoped by this
author that this study will be one of the first of many which attempt to
further define what kinds of social changes can be most helpful to women,
including those whom the modernization process has bypassed, with the
ultimate goal being to improve the lives of all Tunisians.

In conclusion, the process of modernization will probably continue to
expand and grow, affecting increasingly more Tunisians. The results of
this investigation should not be taken to mean that the condition of
rural women will automatically improve as they are affected by
modernization. The extremely poor settlements on the outskirts of Tunis,
where rural families who once had enough money to migrate to the city are living, are evidence enough that increased exposure to modernization does not necessarily mean an improvement in one's living conditions. However, these results do seem to indicate that Tunisian women living in lower-middle-class to middle-class conditions in the traditional village and Tunis do not differ significantly in their stressor levels, number of reported problem solving efforts, or somatic, anxious, or depressive symptom levels, although the descriptive data point to potential benefits resulting from modernization. Furthermore, this study has substantiated qualitatively and quantitatively the devastating effects of poverty combined with a low level of modernization on rural women, who are especially vulnerable because of the paucity of life-improvement alternatives available to them. It is the author's opinion that modernization in Tunisia has the potential to improve the Tunisian woman's lifestyle, but only if it carefully planned and executed with the specific needs of rural, village, and urban women in mind.
APPENDIX

Questionnaire English Version

(Note: Questionnaire spaces have been abbreviated for this appendix.)

I. Demographics

Date & Time interview begins

Location (rural, village, city; whose home)

People present during interview

1. How old are you?

2. How many children do you have? ________ sons; ________ daughters

3. Whose family do you live with?

4. How many people live in your household?

5. Do you work (outside the home)?

6. Did you go to school? Up to what grade?

7. What is your husband's job?
8. Who arranged your marriage? __________________________

9. How many years have you been married? __________________________

II. Lifestyle

10. Do your daughters go to school? (sons?) Yes No ___________

11. Do you go out unveiled? Yes No ___________

12. Do you do the 5 daily Prayers? Yes No ___________

13. What did you eat for breakfast, lunch, and dinner yesterday? ___________

14. How many cups of coffee and tea did you drink yesterday? ___________

III. Stressors & Supports

1.A. The last time you had a problem (any problem), what was the problem?

B. How did you cope with that problem?
C. Was it a big problem or a small problem?
   a. How many times did you have this problem (did this problem occur)?

2.A. The last time you had a problem with your husband, what was the problem?
   B. How did you cope with that problem?
   C. Was it a big problem or a small problem?
      a. How many times did you have this problem (did this problem occur)?

3.A. The last time you had a problem with your children, what was the problem?
   B. How did you cope with that problem?
   C. Was it a big problem or a small problem?
      a. How many times did you have this problem (did this problem occur)?

Prompts (if no answer)
   a. Did you ever get upset with your husband?
   b. Were there any things you wanted that your husband didn't want? What?
   a. Did you ever get upset with your children? Why?
   b. Have your children ever done things that upset you? What?
4.A. The last time you had a problem with a member of your family, what was the problem?
B. How did you cope with that problem?
C. Was it a big problem or a small problem?
   a. How many times did you have this problem (did this problem occur)?

5.A. The last time you had a problem with your household work, what was the problem?
B. How did you cope with the problem?
C. Was it a big problem or a small problem?
   a. How many times did you have this problem (did this problem occur)?

6.A. The last time you had a problem with your Work (outside the home), what was the problem?
B. How did you cope with that problem?
C. Was it a big problem or a small problem?
   a. How many times did you have this problem (did this problem occur)?

a. Did you ever get upset with a family member? Who? Why?
a. Did you ever feel overworked? Why?
b. Did you ever wish you could live somewhere else?

a. Did you ever get upset with a family member? Who? Why?

a. Did you ever feel overworked? Why?
b. Did you ever wish you could live somewhere else?

a. Do you like Working better than staying at home? Why/why not?
7.A. The last time you were ill, what was the illness?
B. How did (do) you cope with that illness (i.e. to help it)?
C. How many times (for how long) did you (have you had) that illness?
D. Did you ever go to a derwish for illness?
   1. What did he (it) do for you?
   2. Did it help you?
E. (Repeat D. for marabout)
F. (Repeat D. for doctor)
G. Do you take any medication?
   1. How much?
   2. How many times a day?
H. Do you use any other treatments?
I. Do you (Have you had) any other illnesses?
   (Repeat above as often as applicable)

8.A. Do you use any contraceptive?
   1. How long have you been using it?
   2. Do you have any physical problems from it?
   3. Does your husband agree with your use of contraceptives?
      a. (If a problem): How do you cope with this?
   4. Does your family (his and yours) agree
with your use of contraceptives?

a. (If a problem): How do you cope with this?

9.A. The last time a member of your family died, who was it?

B. How did you cope with it?

10.A. The last time you were pregnant, was it a problem?

B. When was this?

C. How did you cope with it?

11.A. Did you ever have a child expelled from school?

1. How did you cope with it?

12. Have you had any other problems we didn't talk about?

(If yes):

A. What was the problem?

B. How did you cope with the problem?

C. Was it a big problem or a small problem?

a. How many times did you have this problem (did this problem occur)?

(Repeat as many times as applicable.)
IV. (Problem Solving Efforts Checklist)

Do you do any of the following to cope with a problem? For what kind of problem? Did it help?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. smoke cigarettes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. drink coffee or tea</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. visit a friend or relative</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. scream</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5. cry</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. fight with your husband</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7. hit your kids</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. stop working (in the home)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9. go out (not including to #3 or 16)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>a. where?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. pray or read the Quran</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>11. scrape or hit your face or thighs</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>12. visit the marabout</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>13. become ill as a consequence</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>14. pretend to be ill</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>15. go to the doctor</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>16. listen to the radio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or watch t.v.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>17. sleep</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>18. go to your parents' home</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>19. eat clay or coal</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>20. fast or stop eating</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>21. sleep alone</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>22. keep silent</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>23. Have you done anything else when you had a problem?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Repeat #23. as often as applicable.)
V. **Symptoms** (*symptoms added to original SCL-90*)

(A. Somatization)

Do you experience any of the following?  

<table>
<thead>
<tr>
<th></th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Headaches (When angry or not?)</td>
<td>Yes No</td>
</tr>
<tr>
<td>2. Faintness or dizziness</td>
<td>Yes No</td>
</tr>
<tr>
<td>3. Pains in heart or chest</td>
<td>Yes No</td>
</tr>
<tr>
<td>4. Pains in back</td>
<td>Yes No</td>
</tr>
<tr>
<td>5. Nausea or upset stomach</td>
<td>Yes No</td>
</tr>
<tr>
<td>6. Soreness of your muscles</td>
<td>Yes No</td>
</tr>
<tr>
<td>7. Trouble getting your breath</td>
<td>Yes No</td>
</tr>
<tr>
<td>8. Hot or cold spells</td>
<td>Yes No</td>
</tr>
<tr>
<td>9. Numbness or tingling in parts of your body</td>
<td>Yes No</td>
</tr>
<tr>
<td>10. A lump in your throat</td>
<td>Yes No</td>
</tr>
<tr>
<td>11. Weakness in parts of your body</td>
<td>Yes No</td>
</tr>
<tr>
<td>12. Heavy feelings in your arms or legs</td>
<td>Yes No</td>
</tr>
</tbody>
</table>

(B. Anxiety)

<table>
<thead>
<tr>
<th></th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nervousness or shakiness inside</td>
<td>Yes No</td>
</tr>
<tr>
<td>2. Trembling</td>
<td>Yes No</td>
</tr>
<tr>
<td>3. Suddenly scared for no reason</td>
<td>Yes No</td>
</tr>
<tr>
<td>4. Heart pounding or racing</td>
<td>Yes No</td>
</tr>
<tr>
<td>5. Feeling tense or keyed up</td>
<td>Yes No</td>
</tr>
<tr>
<td>6. Spells of terror and panic</td>
<td>Yes No</td>
</tr>
<tr>
<td>7. Feeling so restless you couldn't sit still</td>
<td>Yes No</td>
</tr>
<tr>
<td>Question</td>
<td>Yes</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>8. Feeling pushed to get things done</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Blurriness*</td>
<td>Yes</td>
</tr>
<tr>
<td>10. Darkness*</td>
<td>Yes</td>
</tr>
<tr>
<td>(C. Depression)</td>
<td></td>
</tr>
<tr>
<td>1. Feeling low in energy or slowed down</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Thoughts of wanting to die</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Crying easily</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Feeling of being trapped or caught</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Blaming yourself for things</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Feeling lonely</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Feeling blue (sad)</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Worrying too much about things</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Feeling no interest in things (bored)</td>
<td>Yes</td>
</tr>
<tr>
<td>10. Feeling hopeless about the future</td>
<td>Yes</td>
</tr>
<tr>
<td>11. Feeling of worthlessness</td>
<td>Yes</td>
</tr>
<tr>
<td>12. Feeling ashamed*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

(D. Psychotic Symptoms)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Heard voices that other people did not hear</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. Felt that other people knew your private thoughts</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. Had a fear of God's punishment</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. Believed something was wrong with your mind</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Time interview ends</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>Primary Researcher's confidence in accuracy of responses</td>
<td>(Not Conf)</td>
<td>(Very Conf)</td>
</tr>
<tr>
<td>Interpreter's confidence</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Questionnaire Tunisian Version

(Note: Questionnaire spaces have been abbreviated for this appendix.)

I. Demographics

Date & Time interview begins ______________________________

Location (rural, village, city; whose home) ______________________________

People present during interview ______________________________

1. فَمَا أَشْهَرُ عَمَرُكَ؟

2. فَمَا أَشْهَرُ عَنْدَكَ أُوْلَادٌ؟

3. هَلَيْكَ مُقْتَمَنْتُ نُسْكَنُ؟

4. فَمَا أَسْبَحَ مِنْ فَرْدِ يُنَضَّنَّوَافِي دَارِكُ؟

5. حَدَّدِمْ (حَارِخُ الْمَنْصُوْرِ)؟

6. قَرْسَنْ فِي الْمُدْرَسَةَ ؟ إِلَيْهِ؟

7. فَنَأَجَمَهُ تُوَجِّهُ؟
II. Lifestyle

10.  بناءً على وجودك في المدرسة؟ أو لا؟
     Yes No

11.  تحليص في الفحصات أوقات؟
     Yes No

12.  أسَّ شُعرت، واس تُحَتَّب، واس تُحَتَّب، البارً؟
     Yes No

III. Stressors & Supports

1.A.  لا جُرَّةُ مُرَّةَ نُخْرِضْتُ إلى مشكلة (أي مشكلة)؟
     آنَشَ كَانَ المُشْكِلَ هَذَا؟

B.  كيفاً سَ تُخْرِضْتُ خَوَ المُشْكِلَ هَذَا؟
المشكل هذا كان كبيرًا والصغير؟
قد أفسد من مرة تعرض للمشكل هذا؟
2.A. أَخْرِجْ الْفُرُضَ إِلَى الْمَشَّالِ، مَعَ إِجَلْكَ،
أَسْرَ الْمَشَّالِ هَذَا؟
ب. كَيْفَ أَنْتُ تَقْرَفْتُ عَنْ الْمَشَّالِ هَذَا؟
2. a. فَأَيُّهَا الْحَنْوَرُ، مَعَ إِجَلْكَ
الْمَشَّالِ هَذَا كَانَ كَبِيرًا وَالصِّغير؟
ب. كَيْفَ أَنْتُ تَقْرَفْتُ عَنْ الْمَشَّالِ هَذَا؟
3.A. أَخْرِجْ الْفُرُضَ إِلَى الْمَشَّالِ مَعَ أُوْلَادِكَ،
أَسْرَ الْمَشَّالِ هَذَا؟
ب. كَيْفَ أَنْتُ تَقْرَفْتُ عَنْ الْمَشَّالِ هَذَا؟
3. a. فَأَيُّهَا الْحَنْوَرُ، مَعَ إِجَلْكَ
الْمَشَّالِ هَذَا كَانَ كَبِيرًا وَالصِّغير؟
ب. كَيْفَ أَنْتُ تَقْرَفْتُ عَنْ الْمَشَّالِ هَذَا؟
3. a. فَأَيُّهَا الْحَنْوَرُ، مَعَ إِجَلْكَ
الْمَشَّالِ هَذَا كَانَ كَبِيرًا وَالصِّغير؟
3. a. فَأَيُّهَا الْحَنْوَرُ، مَعَ إِجَلْكَ
4.A. 

أَخْرَجَ مَرَّةٍ تَخْرَضَ مَسْكِلٍ مَّجِيِّدٍ

مِنْ أَفْرَادٍ عَالِيَةِتْهٍ أَسْرَى المَسْكِلُ هَذَا؟

B. 

كَيْفَ أَنْفَرْتَ فَوْقَ الْمَسْكِلِ هَذَا؟

C. 

الْمَسْكِلُ هَذَا كَانَ كَبِيرًا وَلَكِنْ صَغِيرًا.

۱۲۹۳ مِنْ مَرَّةٍ تَخْرَضَ مَسْكِلٍ هَذَا؟

5.A. 

۳۰۰۰ مِرَّةً حُسْبَيْنِ 

cُحِرَّمَ مَرَّةً تَخْرَضَ مَسْكِلٍ فِي قَرْبِيَّةٍ أَلْدَاءِ أَلْدَاءٍ

إِلَى أَلْدَاءٍ أَلْدَاءٍ؟ أَسْرَى المَسْكِلُ هَذَا؟

B. 

كَيْفَ أَنْفَرْتَ فَوْقَ الْمَسْكِلِ هَذَا؟

C. 

الْمَسْكِلُ هَذَا كَانَ كَبِيرًا وَلَكِنْ صَغِيرًا.

۱۲۹۳ مِنْ مَرَّةٍ تَخْرَضَ مَسْكِلٍ هَذَا؟

6.A. 

۳۰۰۰ مِرَّةً حُسْبَيْنِ وَلَّ

أَخْرَجَ مَرَّةً تَخْرَضَ مَسْكِلٍ مِنْ خَيْرٍ مَّجِيِّدٍ

۱۳۰۷ مِرَّةً أَسْرَى المَسْكِلُ هَذَا؟

B. 

كَيْفَ أَنْفَرْتَ فَوْقَ الْمَسْكِلِ هَذَا؟

C. 

الْمَسْكِلُ هَذَا كَانَ كَبِيرًا وَلَكِنْ صَغِيرًا.

۱۲۹۳ مِنْ مَرَّةٍ تَخْرَضَ مَسْكِلٍ هَذَا؟
7.A. كيف يكون مرض في قلب? أستوعبان مرضك؟
B. كيف تحضر هذه الحالات؟
C. كيف ت bogus من مرض بألفر ضرر هذا؟
D. كيف تحضر عندك مرض بينات الوريد؟
1. أنت يعمل معك؟
2. تنفعلي؟
E. (Repeat D. for marabout)
F. (Repeat D. for doctor)
G. تسعمل في أية؟
1. قد أس كميت ألا ياء؟
2. قد أس من مرة في اليوم؟
H. تسعمل في نسائ أخر لمحفظة أمراض أخرى؟
I. (Repeat above as often as applicable)

8.A. تسعمل في حاجة تمنع أعمل؟
1. من وفاتس تستعمل فيه؟
2. عندكشي وحابع من؟
3. راجلة موافقئشي على استعمال?
a. (If a problem): وفاتس في مشكل من أجل هذا؟
4. عاثليك وعأ ثيلة راجلة موافقئشي على استعمال الله؟
ب. كيف يُعنى في مسأله معًا ممن أصله؟

9. (If a problem):

- كيف نحن نصرف هذا المسألة؟

9.A. نحن عاملة في مألاة فرد من أفراد عائلتك؟

9.B. أتستوتن الفرد هذا؟

9.C. العشيرة من الثلاثة؟ كيف يُعنى مفسحها هذا؟

أسلم؟ وقات؟

10.A. كيف هذا حيلت؟ أآخر مرة للعزة، تعرضت المسأل؟

10.B. وقاتا سكنت حيلت؟

10.C. كيف حيلت تحملت الباب؟

11.A. عند كسي حلد صغير نظر ممن المدرسة؟

11.B. كيف حيلت تحملت نظره؟

12. (If yes):

A. هل يُعنى المسأل هذا؟

B. كيف يُعنى المسألة هذا؟

C. هل يُعنى المسأل هذا؟ كيف يُعنى فدل صغير؟

A. فدل من مهنة تحورضت للمسألة هذا؟

(Repeat as many times as applicable.)
IV. (Problem Solving Efforts Checklist)

1. [Yes No]
2. [Yes No]
3. [Yes No]
4. [Yes No]
5. [Yes No]
6. [Yes No]
7. [Yes No]
8. [Yes No]
9. [Yes No]
10. [Yes No]
11. [Yes No]
12. [Yes No]
13. [Yes No]
14. [Yes No]
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(Repeat #23. as often as applicable.)
V. Symptoms (*symptoms added to original SCL-90)

(A. Somatization)

1. جَابِعُ الرَّاسِ (بَلْغُشَّ أوُلْدَغُشَّ) Yes
2. ذَوُخَةٌ وَالِدَادُ فِي الرَّاسِ Yes
3. جَابِعُ فِي القَلْبِ وَالِدَادُ فِي الْحَيْأَةِ Yes
4. جَابِعُ فِي الْحَيْأَةِ Yes
5. وَذَرَآتُ غَشَتْنِيِّ وَالِدَادُ فِي الْمُعَايِلَةِ Yes
6. تَغَوَّرُ كَبْرُهُمْ فِي الْمُعَايِلَةِ Yes
7. ضُحْيَتْ فِي الْمُعَايِلَةِ Yes
8. تَرْيَجُ مما شَكْنِي وَالِدَادُ فِي الْمُعَايِلَةِ Yes
9. نَعْسُانُ وَالْكَمَيْلُ فِي بَخْحُ التَّفَاغِ Yes
10. عَظَفُ في حَلْكِيَّةِ Yes
11. خَتَالُنِ فِي بَخْحُ التَّفَاغِ مِنْ بَدْيِكَ Yes
12. حِسْانُ بِبَخْحِ الْلُّحْجِ فِي بَدْيِكَ وَالْمَسَاكِنَةِ Yes

(B. Anxiety)

1. إِغْضَرْانِ وَالِدَادُ رَعُبٌ دَاخِلِيٌّ Yes
2. رَعُبٌ Yes
3. حُوْفُ مَفَاجِئُ مِنْ غَيْبٍ نُشْبَ Yes
4. ضَرْبُتْنِ فِي الْبَكْفُ وَالِدَادُ فَتَغَطَّ ي سَريَّ Yes
5. شَغْوُرُ بِالْمُتَّرُ وَالِدَادُ فِي الْعُصَابِ Yes
6. نَزْلُنِ فِي أَوْزُعْنِ وَالِدَادُ أَنْفَجَّ Yes
7. شَغْوُرُ بِأَخْرَةٍ يَمْتَدُّ عَلَى الْهَدْوَةِ Yes
### (C. Depression)

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### (D. Psychotic Symptoms)

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<td>Primary Researcher's confidence in accuracy of responses</td>
<td>(Not Conf) (Very Conf)</td>
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<td>Interpreter's confidence</td>
<td>1 2 3 4 5 6 7</td>
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REFERENCES


