Coping and Adaptation: Theoretical and Applied Perspectives
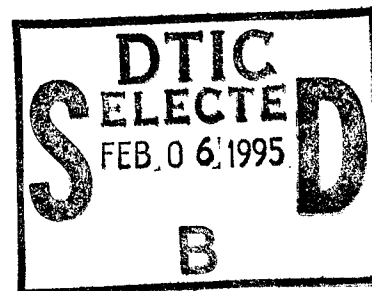
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Soldiers who have limited skills and affective attributes from which to draw to cope with the barrage of requirements from assignment in Germany are less likely to adapt successfully to that environment. At the level of the individual soldier, actions could be taken to assist in acquisition of vital life coping skills that, in turn, would facilitate successful adaptation to life in Europe and reduce problems with retention and performance. This report describes the theoretical framework for the Life Coping Skills in USAREUR project, develops a model of the coping process, summarizes studies that have identified needed life coping skills, reviews literature related to adaptation to the military and to foreign countries, and makes recommendations concerning directions and procedures for project tasks.

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COPING AND ADAPTATION: THEORETICAL AND APPLIED PERSPECTIVES

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INTRODUCTION

CONTEXT OF THE PROBLEM

From the time first-term enlistees step off the plane in Frankfurt until they end their tour overseas, they are confronted with a multitude of demands, many of which are new and difficult. How well these soldiers are able to cope with the diverse aspects of military life in Europe, both on and off duty, has profound implications for the Army as a whole. The research which is reviewed in this paper strongly suggests that soldiers' ability to cope effectively with everyday life affects the extent to which they adapt to their new environment, problems of retention and performance, and consequently the level of mission readiness.

The ability to meet the demands imposed by one's environment is dependent upon the individual's repertoire of knowledge, skills, and affective attributes (values, interests, dispositions, etc.) and the degree to which the person can select, integrate, and apply those personal resources consistent with the requirements of the demand. The ability of adults to function effectively in everyday civilian life has been a topic of national concern. Research in the past decade suggests that large numbers of adults do not possess even the minimal survival and life coping skills. "Almost 23 million Americans lack the competencies necessary to function in society and an additional 33.9 million Americans are able to function, but not proficiently" (Parker, 1976). These results from the Adult Performance Level Study (Northcutt, 1975) are consistent with other research which has assessed the ability of adults to perform life skills (Harris, 1970; National Right to Read, 1972; National Assessment of Educational Progress, 1974; NOMOS, 1979).

In these studies, inverse correlations between performance level and levels of education and income were found. Also, among adults from minority populations and from the southern states there are greater percentages of adults lacking functional competencies. What are the implications of these data for the current analysis of life coping skills within USAREUR (United States Army in Europe)? First, many of the skills required in civilian day-to-day living are demands placed upon military personnel as well. Individuals who were not able to meet these demands as civilians will not be able to meet them as service members. Second, large numbers of first-term enlistees in today's all-volunteer Army have low levels of education, have low family incomes and come from minority ethnic groups and/or the South. Thus, it can be expected that even larger percentages of adults lacking in functional competencies will be found in the Army than are found in the general population. Third, many demands of everyday life are different, and in some ways more troublesome, within the USAREUR military environment than in the civilian United States. Individuals who have had difficulty coping successfully within their "home" environment may have even more problems in their new situation.

The organizational and environmental context of the first-term enlistee in USAREUR poses problems not encountered previously in civilian life within the United States. This situation may necessitate the acquisition of USAREUR-specific skills and the modification of already-possessed skills in addition, quite probably, to the learning of many general life coping skills never gained in civilian life.

When first-term enlistees arrive in USAREUR, they are bombarded with new multiple demands, among which are:

- becoming more familiar with military life after only a brief period of basic training and advanced individual training in CONUS.

- integrating one's self into the new unit both on and off duty.

- acquiring MOS-related skills not learned in BCT and AIT which will be required within the new unit.

- orienting one's self to living in a foreign country which involves learning about that country's culture, language, customs, services, life styles and currencies.

- learning about and making use of agencies and organizations within USAREUR which will assist in the areas of housing, medical and dental care, financial matters, family and child care services, recreational pursuits, education, legal assistance and various other situations faced by soldiers.

- handling the emotions, particularly the stress, which accompany abrupt changes in one's life (e.g., movement to a new geographic location, separation from family and friends and entering a new work environment).

Throughout the first-term in USAREUR, new demands are made of the soldier both on and off duty. These demands are not independent of each other. How well a soldier is able to cope with off-duty situations impinges upon how well that soldier is able to meet on-the-job requirements and vice-versa.

More attention has been given to the immediate problems soldiers face when they arrive in USAREUR than to the kinds of demands likely to occur during the rest of the tour overseas. Of course, the kinds of demands outlined above which initially confront the soldier will continue. Others might include:

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- forming and maintaining friendships and working relationships.

- acquiring skills needed to pass SQTs and advance to higher skill levels.

- accomplishing tasks required for promotion.

- deciding whether or not to reenlist.

- engaging in community activities--both American and German.

- conducting one's life within the institutional requirements of the military and of German law.

- meeting the usual needs related to citizenship, family, health, finances, consumerism, etc. which may be modified by the uniqueness of USAREUR.

- beginning the adjustment process related to leaving USAREUR.

It can be seen from even a cursory look at the context of a first-term enlistee's life in USAREUR that many demands confront the soldier throughout the tour overseas. These, in turn, require that the individual possess and be able to apply a set of skills to cope effectively as the demands occur in daily life. It is to the identification of these critical life coping skills that this paper is addressed.

STATEMENT OF THE PROBLEM

A soldier who has a limited range of skills and affective attributes from which to draw in order to cope with the barrage of requirements within USAREUR is less likely to adapt successfully to the environment from which those demands are emanating. It is at the level of the individual soldier that actions might be taken to assist in the acquisition of the vital life coping skills which, in turn, would facilitate successful adaptation to

USAREUR and, as a result, possibly reduce the problems associated with retention and performance which negatively influence the Army's preparedness. However, several problems must be addressed before such actions can be taken.

First, the specific demands which are most commonly faced by first-term enlistees in Europe, both on and off duty, within the American community and also within the European environment, have not been identified. The second problem is related to the first. No inventory of USAREUR-specific life coping skills currently exists. It is only with respect to particular demands that the skills and affective attributes required by soldiers to cope with life in USAREUR can be systematically determined.

Although USAREUR has many organizations and agencies which are designed to assist the soldier in coping with daily life, problems still exist which are related to the identification of which services address which specific demands and skills and the evaluation of how effectively they do so.

When actions to assist the first-term enlistee in acquiring new skills are contemplated, problems concerning the state of the art in teaching and assessing life skills occur. The techniques, media and delivery system most likely to impact upon a large number of first-term enlistees must be selected. Furthermore, there is a need to empirically test the relationship between life coping skills and successful adaptation to USAREUR.

The first two problems will be addressed in this paper. The other problems will be the foci of subsequent activities of the Life Coping Skills in USAREUR Project.

PRESENT FOCUS

The general purpose of this paper is to review the literature on topics related to the identification of life coping skills crucial to first-term

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enlistees' successful adaptation to USAREUR. This literature includes theoretical work in psychology, sociology and education pertinent to concepts of adaptation, coping, competence, skill and functional competency. Also included is the applied work conducted within both the civilian and military sectors concerned with the determination of critical coping skills and the elements of successful adaptation to USAREUR.

The specific objectives to be accomplished in this paper are to:

1. develop a theoretical framework for the total Life Coping Skills in USAREUR Project on the basis of a synthesis of existing theoretical literature related to key concepts.

2. develop a model of the coping process and analyze conditions within the process under which unsuccessful coping occurs.

3. summarize previous studies which have identified life coping skills needed in civilian life, focusing on methodologies and results relevant to the USAREUR Project.

4. review the literature related to successful adaptation to the military, to USAREUR and to a foreign country in order to suggest domains of life coping skills crucial to first-term enlistees.

5. make recommendations concerning the directions and procedures to be followed in subsequent Project tasks.

ADAPTATION, COPING, AND FUNCTIONAL COMPETENCY:
A THEORETICAL FRAMEWORK

BACKGROUND--A MILITARY PERSPECTIVE

Major concerns of the U.S. Army in Europe (USAREUR) regarding retention
and performance have prompted an investigation of the particular context of
military life in USAREUR and its implications for the adjustment of personnel
assigned overseas. Problems such as low rates of reenlistment, high personnel
turnover because of attrition, behaviors requiring disciplinary action and
health-related early discharge may be due in part to soldiers' inability to
adjust to the USAREUR environment (Manning and Ingraham, 1978; USAREUR FY 80-84
PARR). A study of the USAREUR environment can both aid in understanding
problems of adjustment and contribute to the creation of means to alleviate
these problems. Combat readiness, the primary goal of the Army, is perceived
as affected by problems such as those just mentioned.

The relationships which exist among mission readiness, problems of
retention and performance, and the degree to which soldiers have adjusted to
their new environment are suggested by various military studies which have
been conducted in recent years. The research which has attempted to identify
factors which contribute to military readiness or successful performance of
military duties has not addressed problems of adjustment directly or systemat-
ically. It does, however, provide useful background to the development of a
theoretical framework of adaptation and coping in a USAREUR environment.

One study of soldiers who have been discharged from the Army prior to the
end of their term found a substantial rate of discharge ascribed by superiors
to lack of appropriate attitude, lack of motivation, lack of self-discipline,
inability to adapt socially or emotionally, apathy, as well as misconduct

(Manning and Ingraham, 1978). Another study indicates that the percentage of service members who do not plan to reenlist tends to increase as the time of their stay in USAREUR increases (ARI pilot study), and the results suggest that problems of morale and motivation may account for the change in attitudes towards reenlistment. Failure to adjust to the USAREUR environment is seen as the major reason for the lack of job satisfaction, in particular, and life in USAREUR, in general. Lack of satisfaction is considered among the factors which account for problems of attrition, discipline, physical and mental illness and unsatisfactory rates of reenlistment. A Human Readiness Report (HRDD, 1978) explores factors affecting readiness in several major commands including USAREUR. The thrust of the effort was to identify problem areas affecting readiness. Those identified were: unit personnel problems of well-being; family problems; low ability personnel; drug use; alcohol consumption; motivation; morale and job satisfaction; race relations; discipline, AWOL and crime.

Moskos (1970, 1977) identifies some of the same issues and ties them to difficulties in adjusting to the USAREUR environment. A long separation from the American culture, family and friends, and language barriers present major problems for the soldier who seeks recreation and other human contact outside of the barracks. Enlisted personnel attitudes toward the military are major factors contributing to morale and job satisfaction (see also Borman, et. al., 1975; Chisholm, et. al., 1980), and are likely to be affected by the problems with which these service members have to cope upon coming to USAREUR.

Other studies, though not conducted on USAREUR enlistees, provide some insight into adjustment to military life. Such studies investigated those

who make it during basic training and those who do not; the effects of the military context on the well-being of its personnel, and the demographic and psychological characteristics of enlistees as predictors of successful military performance.

Janowitz (1974) who studied the initial phase of military life, i.e., basic and advanced individual training, identified military organizational characteristics which influence the assimilation of enlisted personnel into their military roles. These characteristics include a highly structured organizational environment which regulates soldiers' behavior both on and off the job. Such an environment severs the enlistees' ties with civilian life, particularly those which conflict with the requirements of the military, and replaces civilian social dimensions with new, military ones. The use of "shock treatment", the sudden and decisive break with civilian life, the denial of privacy, exposure to a pervasive sets of controls, specialization into combat roles--all of which are characteristic of the military environment--create particular problems of adjustment which need to be solved to assure full assimilation. Janowitz emphasizes the absence of satisfactory and reliable techniques to select the right people for the right jobs. Particularly lacking are techniques to identify the required mental, emotional and physical abilities needed for military training and service. Furthermore, entering service members need assistance in their adjustment to the military through developing or reinforcing their self-esteem and their sense of social solidarity.

Worthington (1976) attempted to identify those who could successfully complete basic training and become useful soldiers as well as those who would not be able to adjust, and thus would have to be discharged. He looked at

geographic and demographic data on enlistees, as well as measures of their performance and adjustment during the initial phase of military training. His major conclusion is that adjustment to the military is highly predictable from pre-service adjustment patterns. Early identification of such individuals would contribute to more effective selection and enlistment of servicemembers.

Chisholm, et. al. (1980) studied first-term enlistees and found that their satisfaction with their military jobs was positively related to the congruency between their experiences in the military and their pre-enlistment expectations.

Inasmuch as unit readiness depends on low rates of attrition and disciplinary discharges, as well as on high rates of reenlistment, satisfaction with one's military job may be crucial. It is quite likely that the same incongruency that was found to be related to lack of job satisfaction will also contribute to the enlistees' difficulties in adjusting to their military life.

Other related studies have focused on particular questions such as the quality of military life (Holz and Gitter, 1974), and adaptability to USAREUR (Orend, 1979). While these studies and the other studies cited above have identified problem areas, mostly by using attitudinal data, they have not actually made an effort to conceptualize the process of adaptation, either to the military life in general, or to USAREUR in particular. Thus, none has achieved a critical understanding of the requirements for successful adaptation at both personal and organizational (military) levels. While the recognition of particular related problems is important, and therein lies the contribution of the above sources, there remains a need to understand what adjustment or adaptation to military life entails. As was indicated previously, this need stems from the urgent requirement to minimize problems of attrition, discipline,

physical and mental illness, and to maximize reenlistment rates. Successful adaptation to the military is expected to be a contributing factor in achieving these goals. Furthermore, perhaps because adaptation to USAREUR is more problematic than adaptation to the military in CONUS, adaptation to Army life in Europe is of major concern. Adaptation to USAREUR is problematic throughout the tour overseas and particularly in the initial period of first-term enlistees' stay in USAREUR. Service members, after a short period of time in basic and MOS training, have been transferred from the continential United States to Europe. For these soldiers such changes involve two kinds of relocation; (a) relocation from civilian to military life and (b) relocation from a relatively familiar organizational, economic, and cultural American environment to a European environment which is different and unfamiliar on all three accounts (though more different on the last two, i.e., economic and cultural). How well will these soldiers adapt to their new, unfamiliar environment? What is there within themselves and the environment to which they have been assigned which will serve to enhance (or deter) their adaptation? In other words, what are the requirements, personal as well as environmental, for the successful adaptation of first-term enlistees?

In seeking an answer to such questions there is a need to construct a coherent model of adaptation that can be applied to the USAREUR environment and which will provide a framework for the identification of:

(a) the situational characteristics of the context in which adaptation takes place, as well as the particular requirements or demands first-term enlistees are exposed to upon coming to and living in USAREUR.

(b) the personal characteristics and resources which affect the individual's adaptive behavior.

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(c) those adaptive behaviors which are likely to result in meeting the requirements of the new environment.

Subsequently, the model could be used in establishing methods and procedures to enhance first-term enlistees' adaptation to USAREUR.

As successful adaptation to USAREUR is expected to positively affect retention and performance by reducing problems of attrition, discipline, health and reenlistment, the model and its USAREUR-related specifications could lead to the identification of practical solutions to these problems which adversely affect mission readiness.

Though the military-related literature does not provide such a model, it does present useful data that can be applied to the model; thus it will be discussed later after the model has been developed and presented. The next task is to review and integrate relevant literature taken from a variety of disciplines with the purpose of developing a theoretical model as discussed above.

ADAPTATION

The term "adaptation", often used interchangably with the term "adjustment", is widely employed in both biological and socio-psychological contexts. Within the scope of this review, adaptation is defined as the process by which individuals maintain a congruence or fit with their physical and social environment (McGrath, in Cox, 1978).

The interchange between individuals and their environment is often seen as a stimulus-response frame of action (see Cox, 1978). The requirements or demands people are confronted with are seen as a stimulus, i.e., a requirement for a physical or mental action. The individual's responses to these requirements

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are cognitive and behavioral in nature. Adaptation takes place in the course of such an ongoing interchange by fitting one's self into given circumstances or by changing the environment/circumstances to meet one's needs. To the extent that neither fitting one's self into given circumstances nor changing the circumstances takes place effectively, "maladjustment" or maladaptation occurs. Thus, adaptation is viewed as a focal concept encompassing many strategies or ways of dealing with the environment. Mechanic, a pioneer in the study of adaptive responses, noted two classes of "adaptive devices" employed by doctoral canditates he studied: Coping behavior, encompassing responses to the situational demands, and Defense, responses associated with handling one's feelings about the situation.

White (1960, 1974) developed a similar mode of classification. His adaptive strategies are defined in terms of defense, mastery and coping. Defense is an attempt to protect the self from anxieties stemming from environmental stimuli. Mastery is the end result of meeting task requirements, i.e., successful performance. Coping refers to the ongoing adaptive processes of meeting task requirements under stressful, exceptionally difficult situations.

White (1974) sees adaptation as a process in which the individual strives toward an acceptable compromise with the environment. Adaptation is neither a total triumph over the environment nor a total surrender to it. Rather, it is a transaction, the effectiveness of which lies in meeting three conditions:

(1) adequate information must be secured;

(2) internal conditions such as physiological functions and emotional stability must be maintained;

(3) individual autonomy, freedom of movement and flexibility of choice among alternative ways must be secured.

Mechanic (1974) views the interchange betewen the individual and the environment as more complex. Though he agrees with the approach that sees the interchange in terms of attitudinal fit, or how a person perceives him/herself in relation to the environment, he claims this approach to be inadequate. For him individual-environment fit should be seen primarily in terms of personal capabilities to deal with actual, external demands:

> Successful personal adaptation has at least three components at the individual level. First, the person must have the capabilities and skills to deal with the social and environmental demands to which he is exposed . . . such capacities involve the ability not only to react to environmental demands, but also to influence and control the demands to which one will be exposed and at what pace. Second, individuals must be motivated to meet the demands that become evident in their environment. . . . Third, individuals must have the capabilities to maintain a state of psychological equilibrium so they can direct their energies and skills to meeting external, in contrast to internal, needs. (Mechanic, 1974, p. 33).

Murphy's work (1962, 1974) contains both the notion of personal capabilities, or skills, and the conditions under which particular adaptive responses are elicited. She identifies four categories of behavior involved in adaptation: reflexes and instincts; coping efforts; mastery; and finally, competence. Her approach suggests a certain hierachical order to these behaviors. Reflexes and instincts, which are built-in mechanisms and patterns of reponse, or innate adaptive responses, are insufficient in dealing with the complexities of demands, threats and opportunities life offers. Coping efforts are behaviors applied to deal with situations not adequately managed by reflexes. Effective and well practiced coping efforts result in mastery, and cumulative mastery achievements lead to the possession and utilization of "congeries of skills"; these are competencies.

Thus coping, as a central feature of Murphy's concept of adaptation, implies essentially an individual-environmental transaction in situations

when reflexive responses are inadequate and the individual lacks the mastery

or competence to deal with the situation. In such situations the individual-

environment transaction involves: (a) active efforts, i.e., solving problems,

meeting demands, utilizing opportunities; and (b) defensive efforts to

reduce the anxieties stemming from the threats to which people are exposed.

Beatrix Hamburg (1974) further specifies adaptive strategies as seeking

of information, seeking social approval, and self appraisal.

Common to the works discussed above is that while adaptation is perceived

as a process, adaptive strategies refer to actual behavioral manifestations of

the process. Such strategies command central attention in Hamburg, Coelho and

Adams' review of related literature. Their descriptive statement integrates a

variety of attempts to identify adaptive behaviors, or strategies:

> People tend to approach the environment with plans, to calculate
> and recalculate their risks and opportunities, to take on tasks
> they feel they can handle, to seek actively for information and
> feedback, to prepare for probable difficulties, to provide multiple
> buffers against defeat, to keep some options open, to distribute
> commitment, to set the stage for new efforts by practice and
> rehearsal, and to try a variety of hypotheses in resolving any
> important problem. (Hamburg, Coelho and Adams, 1974, P. 412).

Since adaptation tends to be both anticipatory and reactive, the adaptive

strategies then are employed both in anticipation of demands and in response

to them. Hence adaptation is a _dynamic_ transaction between individuals and

their environment. Strategies of adaptation are concrete sets of behaviors

which take place at every stage of one's life cycle, whenever tasks are to

be performed (see also Erickson, 1959).

Successful adaptation, however, cannot be defined solely on the basis

of the specification of adaptive strategies. The particular conditions which

White (1974) suggests as the parameters of a successful adaptation are

appropriately stated, as it is necessary to keep in mind that the use of

the strategies does not necessarily result in successful adaptation. Mechanic's

emphasis on personal capabilities to cope with situational/environmental demands

and Murphy's concepts of coping efforts, mastery and competence, are particularly

important. In the following sections the concept of coping, the coping process,

the components of the process, its antecedents and situational parameters,

will contribute a fuller understanding of adaptation.

COPING

The centrality of the notion of coping to adaptation is grounded in the

understanding that life contains a great variety of situations in which

innate adaptive capabilities or learned ones are insufficient. For the most

part, the literature focuses on unique, unusual or unpredictable situations,

particularly those which are defined as stressful, ambigious and/or difficult.

Hamburg and Adams (1967) give the following list of such situations: separation

from parents in childhood; displacement by siblings; childhood experiences

of rejection; illness and injuries both in childhood and adult life; illness

and death of children or parents; transitions from home to school, and from

one level of schooling to another; puberty; pregnancy; menopause; moves to a

new environment; retirement; rapid technological and social change; wars.

Studies which centered around similar situations constitute the great

majority of the literature on coping. Some noted examples include Erikson's

work on late adolescence (Erikson, 1959), Bibring's work on pregnant women

(Bibring, 1961), Adams and Lindemann's work with individuals suffering from

long term illness or disability (discussed in Hamburg, Coelho and Adams, 1974)

and Sachar's work with depressed patients (Sachar, et. al., 1968). Other

efforts dealt with burn patients (Cobb and Lindemann, 1943), parents with
fatally ill children (Chodoff, et. al., 1964), and individuals experiencing
acute grief (Lindemann, 1944). Grasha and Kirchenbaum (1980) provide another,
more general, classification of stressful situations or, as they term them,
stressors: failure to achieve goals, goal conflict, role conflict, changes in
life style and unpleasant stimuli in our physical environment.

Many of the situations cited previously can be subsumed under Grasha
and Kirchenbaum's categories of stressors, though the latter are applicable
to a larger variety of situations.

While coping is distinguished by some from defensive behavior (see Lazarus,
et. al., 1974) coping, in general, is perceived as a response to stressful
situations.

Cox (1978) defines coping as a reorganization of the usual patterns of
behavior to reduce stress. Thus coping is, "a process of homeostatic
mechanisms to reduce the impact of a disrupted psychological equilibrium as
a result of experiencing stress." (op. cit., p. 77). Stress, according to
Cox, is an individual perceptual phenomenon, a constraining force; nonetheless,
stress is felt or perceived in situations where an imbalance between the
perception of the demand and the person's perception of his/her capability
to meet the demand occurs. Coping, thus, is the response to the stress. More-
over, stress will occur when responses taken seem inappropriate or ineffective.
Others such as McGrath (in Cox, 1978) emphasize that stress will be experienced
especially when it is important for the individual to meet the demand. A similar
view is held by Lazarus (1976) who sees stress occuring when there are demands
on the individual which tax or exceed his/her adjustive resources. Whether
it will indeed occur depends on the constitutional vulnerability of the person

and the adequacy of his/her cognitive defense mechanisms. At the beginning

of his prolific work on coping, Lazarus restricted the concept of coping to

threat situations (Lazarus, 1966), but later he redefined it as a form of

problem solving in which the stakes are the person's well-being and the person

is not entirely clear about what to do. Coping specifically refers to dealing

with demanding situations and, in this respect, Murphy's explication of the

situations in which coping efforts are employed is, then, not different from

Lazarus' and his colleagues' (Lazarus, et. al., 1974) notion:

> We regard coping as problem solving efforts made by an individual
> when the demands he faces are highly relevant to his welfare (that
> is, a situation of considerable jeopardy or promise), and when
> these demands tax his adaptive resources. Such a definition does
> several things; first, it emphasizes the importance of the emotional
> context in coping; second, it allows inclusion of both the negative
> or stress side of emotion, as well as the positive side of potential
> fulfillment or gratification; third, it recognizes the overlap
> between problem solving and coping; and fourth, it emphasizes
> adaptive tasks that are not routine or automatized, that is, those in
> which the adaptive outcome is uncertain and in which the limits
> of the individual's adaptation skills are approached. (Lazarus,
> Averill and Opton, 1974, P. 25).

Coping involves a variety of behaviors which these authors call direct

actions. These are directed at the alleviation of the relationship between

a person and the environment. Defensive forms of coping palliative in nature

are inferred from behaviorial or physiological (such as illness) manifestations.

Being expressive reactions, palliative responses may be used to indicate a

failure of other forms of coping and are closely related to a lack of knowledge

of how to meet the requirements of the situation.

White (1974) has a similar notion as well:

> It is clear that we tend to speak of coping when we have in mind
> a fairly drastic change or problem that defies familiar ways of
> behaving, requires the production of new behavior and very likely
> gives rise to uncomfortable effects like anxiety, despair, guilt,
> shame, or grief, the relief of which forms part of the needed
> adaptation. Coping refers to adaptation under relatively difficult
> conditions. (White, 1974, p. 74).

The conceptual distinction between the use of defense mechanisms and the use of coping behavior as polarities of responses to stressful, challenging, demanding, or difficult situations is particularly apparent in Mechanic's work. While defense functions as a stress reducer, coping is an instrumental behavior pertaining to problem solving. Still, Mechanic (in Warren, 1978) restricts coping to stressful situations. Instrumental behavior of a problem solving nature involves the application of skills, techniques and knowledge which a person has acquired in previous learning situations. Stress is often a product of the inadequacy of such skill repertories. Thus, coping is what occurs in everyday life. This notion is particularly important, not only because it stands somewhat in contrast with the notion utilized by others, but also because the term coping is applied in the much larger context of everyday life. However, the notion of defensive behavior as separate from coping is misleading. Though defense strategies occur particularly in stressful situations, they too, as instrumental responses, constitute forms of coping. Not only may both categories of responses take place in relation to the same situation, as B. Hamburg (1974) has shown in her study of life cycles, they often occur in the initial phase of coping and function to reduce anxieties so that instrumental forms of coping can take place (see Hamburg and Adams, 1967). From this perspective, successful coping requires an effective balance between stress reduction and problem solving.

Functional Requirements of Coping

The importance of expanding the notion of coping to daily life stimuli lies primarily in what coping, or rather successful coping, accomplishes for the individual.

Several authors enumerated the functions performed as a result of successful coping. Sidle, et. al. (1969) assign four "superordinate tasks" to coping: (1) obtaining relief from tension; (2) maintaining a sense of personal growth; (3) maintaining a rewarding continuity of interpersonal relationships; and (4) meeting the requirement of a stressful task or utilizing an opportunity.

Similarly, Hamburg and Adams (1967), who studied patients with serious illness, identify in their definition of coping the following functions:

(1) keeping distress within manageable limits;

(2) maintaining a sense of personal worth;

(3) restoring relations with significant other people;

(4) enhancing prospects of recovery of bodily functions;

(5) increasing the likelihood of working out a personally valued and socially acceptable situation.

These tasks or functional requirements of successful coping are readily applicable to situations for which behavioral prescriptions are not clear or are absent. Such situations need not be stress producing, however. The above lists are compatible with the premise that when problem solving behavior is unappropriate stress may increase. When this occurs, to be successful coping behavior must provide relief from tension as well as meet the other requirements (see also Cox, 1978; Grasha and Kirchenbaum, 1980). The similarity between the parameters of adaptation delineated by White, and which were discussed earlier, and the functional requirements of coping is to maintain the necessary parameters of adaptation (hence social and physical well-being). Since stressful, difficult situations are considered as threatening to these parameters, coping (or adaptive) resources in such situations may be mobilized

more intensely. These are the high stake situations referred to by Lazarus. However, one's well-being is a state, personal condition, which is maintained not sporadically --only when the stakes are high--but continuously. Coping is an ongoing process. Yet coping is not identical with adaptation. Coping takes place in regards to a situation or a task. It is situation or demand-specific. Coping behavior occurs when particular environmental stimuli calls for a response such as to maintain deadlines, use public transportation, fill out tax forms, be on time for work. Adaptation as Murphy (1974) and White (1974) suggest subsumes several processes such as defense, problem solving, mastery and competence. Accordingly, adaptation (a) encompasses coping with all or most crucial tasks or demands and (b) it denotes a congruent, balanced relation between the individual and the environment which is maintained through ongoing coping behavior. Mastery and competence in the sense Murphy uses them are readily available to the individual who possesses them. Thus adaptation is assured in situations to which they can be applied. But since coping behavior is a prelude to mastery and competence, it is the factor adaptation is most dependent on.

Coping Strategies

Coping by definition is a process, a transaction between the individual and the environment. However, it contains multiple forms of behaviors and individuals rely on some forms more than on others. As was indicated earlier, the most prevalent classification of coping behavior is the dichotomy between the use of defense mechanisms such as repression, denial, reaction formation, isolation, rationalization and intellectualization and direct, problem solving behavioral mechanisms (Lazarus, et. al. (1974) add a lesser used category of

<u>intrapsychic responses</u> when demands are met in wishfulfilling fantasies).
The specification of coping strategies does not differ significantly among
researchers. Coping behaviors have been classified by aggregating a number
of specific behaviors under common labels, often derived through factor
analysis techniques. Sidle, et. al. (1969) developed a list of ten strategies
which they provided to respondents as possible reactions to a situation (a story).
The list of provided strategies contained the following items:

(1) Try and find out more about the situation; seek additional information.

(2) Talk with others about the problem (friend, relative, professional
person).

(3) Try to see the humorous aspects of the situation.

(4) Don't worry about it. Everything will probably work out fine.

(5) Become involved in other activities in order to keep your mind off
the problem.

(6) Take some positive, concerted action on the basis of your present
understanding of the situation.

(7) Be prepared to expect the worst.

(8) Make several alternate plans for handling.

(9) Draw upon your past experiences; perhaps you've been in a similar
situation before.

(10) Try to reduce the tension (e.g., drink, eat, smoke more, exercise).

Analysis of the data did not yield interdependent, i.e., clusters of
coping behavior patterns, though the use of more than one strategy in a
situation occurred. Some sex and educational level based differences were
found but no clear patterns emerged. Respondents also gave free responses
which yielded different coping strategies, some of a less socially acceptable

nature. The ten strategies listed above are congruent with more general classifications that distinguish between behavior oriented toward problem solving and behavior oriented to the reduction of stress (White, 1974; Mechanic, 1974; Murphy, 1974; and Lazarus, et. al., 1974). The utilization of factor analysis by both Robbins and Tanck (1978), and Burke and Weir (1979), expand the classificatory list into more useful categories than merely "coping" versus "defense".

Robbins and Tanck (1978) studied students coping with tension. Twenty-two items of specific responses were presented to students who then indicated how often they acted as the item prescribed. The items yielded seven factors explaining 63 percent of the variance. These were as follows:

(1) seeking social support;
(2) dysfunctional behavior (i.e., ineffectiveness, irritability);
(3) "narcotizing anxiety" (smoking, drug use);
(4) problem solving;
(5) reliance on professionals;
(6) bearing with discomfort--"hanging in until the tension passes";
(7) escape. (op. cit., p. 380).

Burke and Weir (1979) studied coping behaviors of married couples. Thirty-eight items rated by respondents on a Likert (seven point) scale yielded eight factors accounting for 51 percent of the variance:

(1) distraction and suppression (nine items)

(2) variable responses (five items)

(3) alcohol/drugs (four items)

(4) withdrawal/escape (five items)

(5) problem solving (six items)

(6) talking with others (three items)

(7) explosive outbursts (two items)

(8) prayer and meditation (two items)

Some of the items were taken from those of Sidle, et. al., (1969) which

were reviewed previously. However, we do not have the whole list, nor is

it clear that there exists a coherent, validated, commonly used list of

coping behavior indicators.

The following example offers additional coping behavior indicators.

Grasha and Kirchenbaum (1980) distinguished between defense mechanisms and

what they term coping mechanisms. The latter are those which meet the

immediate demands of a situation and contribute to an individual's growth

and development. The authors see coping mechanisms or strategies as oriented

toward:

        (1) searching for information
        (2) solving problems
        (3) seeking help from others
        (4) recognize our feelings
        (5) establishing goal and objectives (op. cit., pp. 260-261).

These are according to Grasha and Kirchenbaum "the ways we cope". Though

they provide examples they use them under somewhat different, though not

inconsistent, labels. In addition to "objective and logical analysis of

the situation", "development of alternative solutions" and "search for support",

the authors suggest "being aware of feelings of others" and "believing that

we are in control of our lives and environment". Grasha and Kirchenbaum's

list differs from other lists cited previously in that instead of emotional

response in the form of stress reduction, here the emotional response is

of a constructive, problem oriented nature.

In their presentation of their model of coping, Lazarus, Averill and

Opton raise the issue of the need to create an adequate classificatory system

for coping processes: "varieties of coping must still be specified and

classified so as to provide a basis for their assessment and for the study of

their determinants and consequences" (Lazarus, Averill and Opton, 1974, p. 251).

The study of coping should encompass a variety of response elements, i.e., behavioral indicators which are "likely to be far superior in permitting accurate inferences about emotional states . . ." (op. cit., p. 279). In addition, generic terms such as instrumental behavior versus palliative behavior (Lazarus and Launier, 1978) or problem solving versus defense (Mechanic, 1974) are insufficient. These do not depict the different consequences which different strategies may have for the individual; especially in terms of one's sense of self worth and his/her interpersonal relations. For example, denial is unlike explosive outburst--though both may relieve stress. Denial may not alter the individual's significant relations while explosive outburst is likely to result in such alteration. From a clinical point of view, patients who resort to denial may need to be treated differently from those who resort to explosive behavior, and so on. From a societal point of view, overt behaviors such as explosive behavior or drug use are much less tolerated than prayers and meditation. Moreover, some emotional reactions, though interpreted to indicate defenses, can be constructive. The reduction of stress allows further effective dealing with demands free of disruptive emotions.

One other related concept--coping style--needs to be mentioned. The term is used in two different ways. One, as discussed by Monat and Lazarus (1977) denotes the individual's personality-based propensities, or dispositions, to cope either through direct action or use of palliative strategies. The second use of the term coping style denotes the form individual-environment transaction takes--either the individual changes the environment/circumstances or the individual makes an internal accommodation. Diaz (1979) identifies

the active style to denote environmental change and the passive style to denote personal-internal change. In his study of American and Mexican school children, the effects of cultural prescriptions of behavior on coping styles become evident. The style used by Mexican children is to passively endure; problems imply self-modification as a solution. The style used by American children is to actively change both the physical and the social environment. The distinction between and the reference to cultural imperatives is important because within the American culture passivity often is regarded as non-coping and thus as not socially acceptable.

Thus, to understand people's coping behavior or better yet, to try to predict how they will cope with certain situations, their cultural background must be kept in mind.

Newman (1979) expanded the list of categories of coping styles in her discussion on the coping behavior of adolescents which was based on Piagetian concepts. She identifies two types of people: censors--those people who limit sensory experience, reject information that does not conform to their traditional values, and sensers--those people who are influenced by their experiences, seek new information. While the former tend to be traditionalists and conservatives, the latter are the modifiers.

This study also points out that an individual's response to the environment is mediated by that person's values. These values may be embedded in the values of a youth culture, some in a religious background, etc. The role of values and other personal attributes in the coping process has been an integral part of the literature on coping. These can be viewed as antecedents and components of the coping process. Another aspect of the coping process is the situation from which demands emanate. These are the next topics to be addressed.

Antecedents of Coping: Personal Attributes and Situational Characteristics

That personal constitution, personal attributes and dispositions affect coping behavior is an assumption on the basis of which a great deal of research has been conducted, especially in the study of defensive response. The adaptive or coping capabilities of the individual are often defined in terms of such variables as ego resiliency or ego control (Block, 1965), self-esteem (Rosenberg, 1965; Washburn, 1961), zest as opposed to apathy (Neugarten, 1961), cognitive styles (Moos, 1974; see also discussion in Lazarus, et. al., 1974), need for social approval (Crowne and Marlowe, 1964), and motivation (Mechanic, 1974). Ego strength and self-esteem reduce vulnerability to threat and facilitate healthy or adaptive forms of coping (Lazarus, 1966). The problem of individual vulnerability has been defined by Gramezy (1970) as a person's susceptibility to suffer emotional injury. Related concepts are self-conception, sense of self worth or self-esteem. Other important personal traits or tendencies which enhance or weaken one's ability to deal more or less effectively with the environment are intelligence, creativity, mental health, and achievement motivation. These Williams (1979) refers to as the "master trait list". Smith (1966) found self-confidence, dependability, responsibility and openness to experience (clustered as "self-confident maturity") to be positively related to ratings of psychological effectiveness and performance.

It is possible that most of the work in this area of research focuses on traits and particular defensive behaviors, rather than other coping behaviors, because it is the defensive behaviors which are considered as negative or as indicative of a failure to cope. The studies cited above have shown that highly motivated individuals who have a positive sense of self, who have a sense of control over their life circumstances (a sense of self-agency or

internal control, Rotter, 1966) are more likely to employ instrumental coping behaviors, and perform well.

Personality variables are viewed primarily as antecedents to coping and adaptation, yet the relationship between personal affective attributes and coping/adaptation is a dynamic one. Individuals may not only maintain their self-worth, for example, but also strengthen it as a result of successful coping: their sense of control may increase and they will be even more motivated to handle future demands.

Coping cannot be fully understood, however, on the basis of personal attributes and behaviors which are highly determined by one's environment, culture, religion, etc. These do not provide a full explanation of why people employ one coping behavior or another. Mechanic (1974) and Lazarus, Averill and Opton (1974) emphasize strongly the need to include "situational" or "ecological" variables in a model of adaptation or coping.

Mechanic (1974) states that a person's abilities to cope with the environment depend on the idea that

> the efficacy of the solutions that his culture provides, and the skills he develops are dependent on the adequacy of the preparatory institutions to which he has been exposed . . . similarly, the kinds of motivation that people have and the directions in which such motivation will be channeled will depend on the incentive systems in a society--the patterns of behavior and performance that are valued and those that are condemned. Finally, the ability of persons to maintain psychological comfort will depend not only on their intrapsychic resources, but also--and perhaps most importantly--on the social supports available or absent in the environment. (op. cit., p. 33).

The environment in which a person lives and operates, the community at large, the organizations one works in or comes in contact with, groups a person belongs to, define and prescribe solutions to certain challenges, demands or tasks. Such solutions are not always prescribed clearly but are suggested through

values, beliefs, attitudes and the like. Thus coping involves not only

conformity to institutionalized solutions to environmental demands and

daily life challenges, but also the learning of knowledge of these solutions

and the possession of skills to employ the solutions. This is not to say

that the environment does not provide alternative solutions, nor that it does

not allow new solutions. Rather, ranges of what is acceptable by way of

alternatives and new solutions do exist.

Lazarus, Averill and Opton (1974) base their model of coping on the

claim that:

> coping can never be assessed or evaluated without regard to the
> environmental demands that create the need for it [coping] in the
> first place. It is essential that we discover how each type of
> situation initiates, shapes, and constrains the forms of coping.
> (op. cit., p. 258).

The situation that arouses coping behavior is dealt with by these authors

in terms of the interpretations the individual draws from the stimuli.

People's perceptions of the same situation vary and this variance may explain

in part why people differ in their responses to the same or similar situations.

Any environmental factor that influences the perception and appraisal of the

situation is termed by the authors as an ecological variable. Ecological

variables relate to the physical environment (climate, terrain, etc.); the

social environment (institutions, roles, customs, rules); population character-

istics (race, age); and the adaptive problem at hand in terms of its importance,

difficulty and desirability of its solution. When an individual is faced with

a demand, such ecological information is appraised and evaluated regarding

its relevance to the individual's welfare. The above works enhance the notion

that the individual-environment relationship contains feedback elements.

Responsive behavior is met with environmental response, new demands,

information and the like. The position of the individual vis a vis the environment is constantly changing. In some instances this results in disturbing the relationship's equilibrium; in other, it serves to maintain the balance.

This notion has to be kept in mind when speaking of coping and its functional requirements. Most of the literature, however, does not deal with this idea on any operational level, although it is not inconsistent with the approaches taken. Coping cannot be seen nor studied as a one-way process, i.e., individual response to stimuli. Moreover, the coping process a person goes through, especially when automatic behavior is not applicable, often involves feedback from the environment and readjustment or change of coping behaviors. Lazarus, et. al. (1974) conceptualize such a process in terms of "the mediating cognitive processes of appraisal and reappraisal by which the individual obtains and evaluates information about the adaptive significance of an environmental event." (op. cit., p. 305).

The personal and environmental antecedents of coping constitute the two main variables in a model Lazarus, Averill and Opton (1974) formulated to explain variance of coping behaviors/responses among individuals. People cope in particular ways on the basis of their appraisal of the events with which they must cope. Situational, ecological and personal dispositions and attributes are the factors that influence the appraisal process.

Competence

An earlier discussion brought to attention White's (1974) and Murphy's (1974) concepts of mastery and competence. While White refers to fitness, ability to carry on a transaction with the environment, Murphy speaks of the development of skills which result from cumulative mastery achievement. The

aggregation of such skills is termed by Murphy as competence. White develops the concept of "sense of competence". This results from one's manipulation and exploration of the environment, and forms the subjective aspect of competence. In a similar manner, other psychological studies have focused on the relationship between competence and personal dispositions, or affective attributes, such as intelligence, creativity, motivation, self-esteem (see Williams, 1979).

Developmental psychologists who studied the development of competence in young children looked mostly at concentration, persistence, selectivity and directness, initiation and sustainment of certain physical activities (Wenar, 1964; Gramezy, 1970, 1971). Gramezy uses the categories of physical social and intellectual (cognitive) competencies. These are measured by the quality of peer relations, academic achievement, commitment to learning, purposive life goals and one's successful work history, as well as scores of personality dimensions and psychiatric status. His work focused on personal vulnerability as a determinant of competence. Both White (1960) and Wenar (1964) identified motivational dispositions as the source of competent or incompetent activities. Smith (1966) found task performance to be highly related to what he calls self-confident maturity. This personality component was inferred from factor analysis data showing a cluster of items such as self-confidence, dependability, resonsibility and openness to experience. Ezekiel (1968), whose work was based on that of Smith, found task performance to be related to sense of agency--whether an individual sees him/herself as the prime agent in determining what happens in his/her life. Kahn and Rosman (1972) found social competence to be associated with personality factors which indicate propensities for participation and interest.

Summarizing studies on competence Williams (1979) arrives at the following definition of competence:

> Competence is a cluster of experientially based attributes that may be described as substantially diverse but functionally interrelated. The attributes or "personal ingredients" of compotent coping are seen to comprise motivational ability and achievement components that are manifest in whatever area the individual chooses to exercise his competence. (Williams, 1979, p. 168).

The three components of competence according to Williams are defined by means of the following indicators:

(1) motivation indicated by goal setting, future orientations and aspirations;

(2) sense of agency indicated by confidence in one's ability, independence (a widely used scale to measure sense of agency was developed by Rotter (1966)).

(3) sense of accomplishment which develops as a result of successful transactions with the environment and performance of difficult tasks, especially performance that is perceived as the outcome of one's own effort ("agency").

The three components are highly interdependent and are also related to other personality traits such as self-esteem, cognitive abilities and emotional stability (see Shybut, 1968, 1970; Lefcourt and Telegdi, 1970; Joe, 1971; Fish and Karabenick, 1971). Moreover, motivation, sense of agency and sense of accomplishment are not only the antecedents to the individual performance but are also affected by the performance:

> Cumulative accomplishments feed back into the individual's sense of agency to produce a type of set or belief in goal attainment. . . . He gains confidence in his ability and accomplishes now with greater facility. His behavior becomes more skillful and effective with the consequence of a reduction in the "tensional" aspects of motivation. This reduction in disruptive tensional

aspects of motivation helps to account for the greater cognitive skills and the effective use of these in the highly competent individual. (Williams, 1979, p. 184).

The importance of skills is strongly emphasized by Mechanic. Skills are what people need to possess in order to deal with social and other environmental demands (Mechanic, 1974). The acquisition of these skills takes place mainly through socialization processes both formal (at school, for example) and informal (through interaction with parents and other significant people). Since life circumstances change frequently throughout the life cycle, the development and maintenance of skills, the acquisition of new ones and the application of skills in a variety of situations, are ongoing processes. The variety of skills an individual needs to have in order to accomplish the tasks of modern society is described by Lukeles (1966, pp. 265-283):

> Effective participation in a modern industrial and urban society requires certain levels of skill in the manipulation of language and other symbol systems, such as arithmetic and time; the ability to comprehend and complete forms; information as to when and where to go for what; skills in interpersonal relations which permit negotiation, insure protection of one's interests, and provide maintenance of stable and satisfying relations with intimates, peers, and authorities; motives to achieve, to master, to persevere; defenses to control and channel acceptably the impulses to aggression, to sexual expression, to extreme dependency; a cognitive style which permits thinking in concrete terms while still permitting reasonable handling of abstractions and general concepts; a mind which does not insist on excessively premature closure, is tolerant of diversity, and has some components of flexibility; a sonative style which facilitates reasonably regular, steady, and persistent effort, relieved by rest and relaxation but not requiring long periods of total withdrawal or depressive psychic slump; and a style of expressing affect which encourages stable and enduring relationships without excessive narcissistic dependence or explosive aggression in the face of petty frustration. (Cited in Hamburg, et. al., 1974, p. 414).

Motivation, cognitive styles and skills, social skills and emotional abilities all contribute to adaptation, the accomplishment of life tasks.

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A person who has such skills, abilities and personal dispositions is "competent", capable of enduring and meeting the demands of life events.

Costa (1978) describes a competent person as an individual who:

(a) can sustain a performance over repeated situations. That is, he/she does not do it once but performs it repeatedly;

(b) has a repertoire of performances from which to select according to a given situation;

(c) can make judgements as to which performance to use and when the performance is not yielding the desired results;

(d) can change the performance when needed.

Costa's list of characteristics of a competent person implies the importance of affective attributes to competence as discussed previously. The competent person must have personal resources in order to successfully cope. Such resources--knowledge, skills, attitudes, values, goals and dispositions--are utilized by the competent individual in accomplishing diverse tasks, throughout the coping process.

MODEL OF THE COPING PROCESS

Having identified concepts and their interrelationships relevant to coping and adaptation, a theoretical model of the coping process can be formulated.

Based on the literature, and for the purpose of the Life Coping Skills in USAREUR project, coping is defined as the process by which an individual deals with specific daily demands. The demands enamate from the environment with which the individual interacts. Adaptation pertains to the process by which an individual interacts with the environment in order to maintain a congruence, i.e., an equilibrium with this environment, throughout the individual's life cycle.

Coping is the key process in adaptation and a successful adaptation depends greatly on the ability of the individual to cope with environmental demands.

Coping and, subsequently, adaptation are shaped and affected not only by personal abilities and attributes, but also by the particular situational parameters which constitute the context in which the individual acts to achieve a congruent relationship with the environment. Situational parameters include physical, social, cultural and organizational characteristics, particular requirements, demands or tasks, the individual has to meet, as well as prescribed means, i.e., resources, and ways to meet the demands. The dynamics of both coping and adaptation consist of:

(a) the individual's response to what is perceived to be the demand situations and the prescribed resources and solutions to meet the demands;

(b) the environment's response to the individual's own adaptive, or coping behavior.

In responding to the environmental, or situational stimuli, the individual establishes a sense of competence which depends on both the individual's adaptive resources and the individual's appraisal of the results, or consequences, of the coping strategy enacted in response to the environmental demand.

Figure 1 summarizes the components, and their interrelationships, of the interchange between the individual and the environment in terms of coping behavior.

The main components, or stages of the coping process which takes place when an individual is faced with a specific demand situation are as follows:

1. appraisal of self, environment or situation, and demand;

2. choice of strategy to deal with the demand, based on appraisal;

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COPING BEHAVIOR

ENVIRONMENTAL/
SITUATIONAL PARAMETERS

physical, social
cultural and organiza-
tional characteristics

requirements,
demands, tastes

prescribed means and
ways to meet demands

environmental stimuli

Appraisal of situational parameters

Appraisal of self vis a vis
situational parameters

Choice of strategy

Enactment of strategy

Appraisal of results

Reenactment/change of strategy

sense of competence

INDIVIDUAL
ADAPTIVE RESOURCES

skills

values

motivation

attitudes

interests/goals

Figure 1: Individual-Environment Interchange: Coping Behavior

3. enactment of strategy: instrumental to meeting the demand, i.e., problem solving, and/or defense to reduce stress;

4. appraisal of results of enactment;

5. reenactment or change of strategy.

As the individual appraises both the environment or situation and his/her ability to meet the environmental demand, stress, anxiety, or tension may be experienced by that individual if:

- the situational demand is difficult or impossible to meet;

- individual or environmental resources are not known, are non-existent or are perceived to be inadequate;

- the demand is not recognized or is assessed as not requiring a response, and, therefore, is not met; if the environment responds to the individual who has not met the demand with sanctions and other forms of enforcement, such a response may threaten the individual.

Under such conditions the individual may choose to deal with the stress, that is, to try to reduce it. In this event the individual does not meet the demand at all or meets the demand while or after the stress is reduced. It is also possible that the individual meets the demand but is unable to reduce the stress. Another possibility is that neither the demand nor the stress are adequately dealt with and the individual may succumb to the stress and stay in a disruptive emotional state.

Successful coping occurs when the demand has been met without disruptive emotional effects. Furthermore, for coping to be successful each one of the stages in the coping process must be effectively performed. Figure 2 presents

DEMAND SITUATION

Individual enters/is placed in demand situation

appraisal & assessment

IS DEMAND RECOGNIZED? *No* — Situation may force recognition

Unresolved situation may produce stress

Individual remains in unresolved demand situation, experiences stress

ARE DEFENSE MECHANISMS/DENIAL APPLIED? *No*

Yes — Individual remains in unresolved demand situation, but stress is reduced or eliminated

IS REQUIREMENT RECOGNIZED?

No

Yes

Individual assesses resources to meet demand. DO THEY EXIST/CAN THEY BE DEVELOPED?

No

Yes

Individual applies resources, appraises results of strategy.

IS STRATEGY SUCCESSFUL?

No

Yes

Demand is met

Figure 2: The Coping Process

the model of the coping process. It depicts the stages through which the individual goes while coping with a specific demand situation.

At each stage of the process, some condition has to be met to assure successful coping:

(a) In the appraisal of the situation the demand has to be recognized. If it has, the individual assesses personal and environmental resources to meet the demand. If the demand has not been recognized, it will not be met. The environment may enforce recognition. The unresolved situation is likely to produce stress and lead to the enactment of defense strategies to reduce the stress and/or will redirect the individual to recognize the demand.

(b) In the assessment of resources, the individual has to accurately perceive whether resources are available and adequate. If resources are available and perceived to be adequate, the individual has to apply resources to meet the demand. If resources are unavailable or inadequate, stress is likely to occur and the individual, if unable to summon new resources, is likely to use defense strategies to reduce stress or will succumb to the stress and remain in a disruptive emotional state.

(c) In the enactment of strategy and appraisal of results, the problem has to be solved; that is, the demand has to be met effectively and stress controlled or eliminated. If the problem has been solved and stress (if it occurred at all) has been controlled, the individual has successfully coped with the specific situation, and is likely to reenact the strategy in similar situations in the future. If the problem has not been solved because of ineffective enactment of strategy, or because of the enactment of an inappropriate strategy, the individual should reappraise the situation and choose another problem solving strategy which is perceived to be appropriate

to the situation. If no other problem solving strategy can be applied, stress may increase and the individual may choose to deal with the stress or succumb to it. By using defense strategies without solving the problem, i.e., not meeting the demands, the individual also creates additional barriers to solving the problem effectively. For example, denying the problem, rejecting its existence or importance, or discarding the need to solve the problem, makes it not only more difficult for the individual to recognize the problem for what it is, but also may bring on environmental response which may result in punitive actions, "rehabilitative" treatments and ultimately the removal of the individual from the environment. If removal is not desired by the individual, not only will stress increase, but also negative ramifications to the individual's future may occur.

As was indicated previously successful coping occurs when the demand which the individual is required to meet is met effectively, and the individual's level of anxiety is not disruptive either to meeting the demand or to the individual's general sense of well-being.

Through successful coping the individual

(a) maintains, or increases, a sense of self-worth;

(b) maintains rewarding, effective interpersonal relationships, and

(c) maintains a sense of well-being.

Moreover, through successful coping with all or with the most crucial demands which the environment requires the individual to meet, successful adaptation is most likely to occur. That is the individual achieves a congruent relationship with the environment; he/she is capable of functioning in the environment in a manner satisfactory to both self and the environment.

COPING IN THE USAREUR CONTEXT

Among the tasks of the Life Coping Skills in USAREUR project are:
(1) the identification of the particular life coping areas which are important
to the successful adaptation of first-term enlistees to the USAREUR environment,
and (2) the specification of coping skills necessary to meet the demands with
which first-term enlistees are faced in each of these life coping areas.
The model of the coping process presented here also specifies other personal
attributes and situational parameters which need to be identified and assessed
in order to insure the successful coping of first-term enlistees and subsequently
their successful adaptation to USAREUR.

While these tasks are designed to be accomplished in subsequent phases
of the Life Coping in USAREUR project, the following discussion focuses on
the model of coping in terms of life coping in USAREUR.

In the USAREUR context the first-term enlistee is a member of a highly
structured organization which regulates the soldier's behavior on and off
duty. Rules and regulations specify what the soldier has to do in terms of
a job, extracurricular duties, relationships with supervisors and peers. The
military organization provides legal, social, recreational, medical, financial
and other services, the delivery of which is organized in particular ways.
In addition, the civilian environment, the German society and its various
social, cultural, economic, political and administrative institutions, are
an integral part of the first-term enlistee's environment, with which inter-
action may be expected to some extent. The soldier must meet job demands
and personal needs on the basis of personal resources, and those resources
which are available through and acceptable by the military and the German
environment. The soldier has to drive or use public transportation as

prescribed by the law, purchase food at prescribed prices and where it is available, behave according to local rules when using recreational and other facilities, and so on. Similarly, the enlistee has to fulfill a military job according to prescribed regulations and meet required levels of job performance.

Whether the soldier successfully copes with these demands will be determined to a large extent by his/her adaptive resources, i.e., skills to meet the particular demands; positive attitudes toward the military, Germany and self; motivation to perform successfully; and his/her personal goals to the extent that they do not contradict with the military goals.

USAREUR is a new, unfamiliar environment to the first-term enlistee. The novelty of the situation may produce stress and anxiety for the newcomer who is required to function in this environment but who does not perceive how or if it can be done effectively. The enlistee's perception and assessment of the environment depends greatly on the extent to which he/she becomes familiar with the USAREUR environment through personal efforts and/or through organizational (military) orientation and in-processing programs. Becoming familiar with USAREUR and meeting daily demands on and off the job are an ongoing process as the service member increases participation in the environment. Thus, perceptions and assessments change, are reevaluated continuously and are effected by experiences the soldier has in USAREUR. Through this process the enlistee's sense of competence and sense of ability to meet the demands of the new environment will be established. Subsequently the enlistee's coping behavior will take form and possibly change to meet the environmental demands more effectively. If the enlistee does not perceive him/herself as capable of meeting the demands, because of actual or perceived

lack of appropriate adaptive resources and/or environmental support, he/she may choose not to meet the demand and/or try to reduce the stress without actually meeting the demand. The soldier's sense of competence, as a result of the coping behavior taken and the environmental response to this behavior, will effect and possibly change the enlistee's attitudes toward the new environment as well as his/her motivation to stay in it and to meet further requirements in a satisfactory manner.

Given the difficulties first-term enlistees encounter in USAREUR, how can their coping be enhanced? How can the individual service member be equipped so problems or demands encountered can be solved? While the environment can facilitate problem solving, it is the individual who must be able to utilize environmental support effectively.

The model of coping presented in this report conceptualizes the individual's ability to meet life demands as a crucial element in the process of coping. Accordingly, the first-term enlistee must possess the skills and affective attributes necessary to successfully cope with the demands of the USAREUR environment. If the soldier does not possess such skills and affective attributes, he/she is not <u>functionally competent</u> to cope with the demands emanating from living and working in USAREUR. Thus, these skills must be acquired and the necessary attitudes and dispositions must be developed.

The concept of functional competence has been a focal issue of concern and research in civilian education during recent years. Concepts and theories which have been developed by adult educators, in particular, have applicability in further expanding upon our model of the coping process and are discussed next.

FUNCTIONAL COMPETENCY

From the model of the coping process, it is apparent that throughout the process an individual must possess a wide range of cognitive and psychomotor skills and a variety of affective attributes if the process is to result in successful coping. At each stage, from the appraisal of the situation to the utilization of one or more coping strategies, the person must draw upon personal resources. Although a few abilities are innate (e.g., reflexes), most of the skills and attributes required for successful coping are learned. Evidence previously cited indicates that large numbers of adults have not acquired the abilities needed to cope effectively with everyday life. Therefore, educators have concerned themselves increasingly during the past decade with the identification, assessment and instruction of the skills crucial to success in meeting the demands of day-to-day life. Preliminary to many such efforts, educational researchers have developed conceptual models and theoretical frameworks on which to base their programs. Their constructs, models, domains and characteristics provide further input to the Life Coping Skills in USAREUR Project in its endeavors to identify, assess and provide training in the life skills most critical for first-term enlistees in Europe.

Functional competency is the term used by the Adult Performance Level (APL) Project of the University of Texas at Austin to connote the ability to use the skills and knowledge needed to meet the requirements of adult living (The Adult Performance Level Project, 1977). The antecedent of the APL project was a challenge issued in 1970 by the Director of the Division of Adult Education Programs of the Office of Education "to foster through every means the ability to read, write and compute with the functional competence needed for meeting the requirements of adult living" (Delker, 1970). Since

1971, the APL Project has been working to help adult educators meet this
challenge. Initial APL project efforts germane to this section of the litera-
ture review were to define key terms and to construct a general theory of
adult functional competency. The APL theory of functional competency was
arrived at through four simultaneous lines of research: (1) a review of
related literature and research; (2) an extensive survey of state and federal
agencies and foundations; (3) a series of conferences on adult needs in
different regions of the country; and (4) a series of semi-structured inter-
views with undereducated and underemployed persons. Among other outcomes
of these activities, Northcutt and his colleagues developed a general theory
of adult functional competency which includes the following key concepts.

1. Functional competency is a construct which is meaningful
    only in a specific societal context. A corollary of this
    thesis is that, just as functional competency is culture-
    bound, it is perhaps even more closely bound to the tech-
    nological state of a particular society. The person who is
    functionally competent in one society may be incompetent in
    another. Furthermore, as technology changes, the require-
    ments for competency change.

2. Functional competency does not consist just of a single skill
    or even a set of skills. Relevant to the skills and general
    knowledge areas identified by APL research, functional
    competency is two-dimensional; it is best described as the
    application of a set of skills to a set of general knowledge
    areas which result from the requirements imposed upon members
    of a society. The APL project used this approach as the basic
    framework for generating the essential elements or performance
    requirements of adult functional competency.

3. Adult competency is a function of both individual capabilities
    and societal requirements. To restate the thesis: A person
    is functionally competent only to the extent that he or she
    can meet the requirements which are extant at a given point
    in time. If the requirements change and the individual does
    not adapt by either acquiring more or different knowledges and
    skills, then that person becomes less competent. Functional
    competence is a dynamic process, rather than a static state.

4. Functional competency is directly related in a mathematical
   sense to success in adult life. This is an operating assump-
   tion which underlies all APL research activities. However
   we define functional competency, we expect more competent
   adults to be more successful. (Northcutt, 1975, p. 2-3).

The theory of functional competency developed by the APL project is
depicted in a two-dimensional model. One dimension consists of the five
general knowledge areas identified as constituting the content of adult needs.
These are consumer economics, occupationally-related knowledge, community
resources, health ,and government and law. The other dimension is composed
of the skill areas critical to adult performance: communication skills
(reading, writing, speaking and listening), computational skills, problem
solving skills, and interpersonal relations skills. Figure 3 presents the
framework of the APL Model of Functional Competency.

Subsequent APL activities to be discussed later in this review used this
model to specify general requirement statements and situation-specific tasks,
to develop performance indicators, to assess a national sample of adults using
the APL survey, to determine competency levels associated with different
levels of adult success and to design, develop, implement and disseminate
an educational program addressed to functional competency.

William Spady, formerly with the National Institute of Education, shares
the view of many others who have been working in the area of competency
based education that competencies are "indicators of successful performance
in life role activities (be they producer, consumer, political citizen,
driver, family member, intimate friend, recreational participant, or life-
long learner" (Spady, 1977, p. 10). He expands this definition to include
the ability to create effective results in one's life (1978). This definition
of competencies has several key elements which have implications for the

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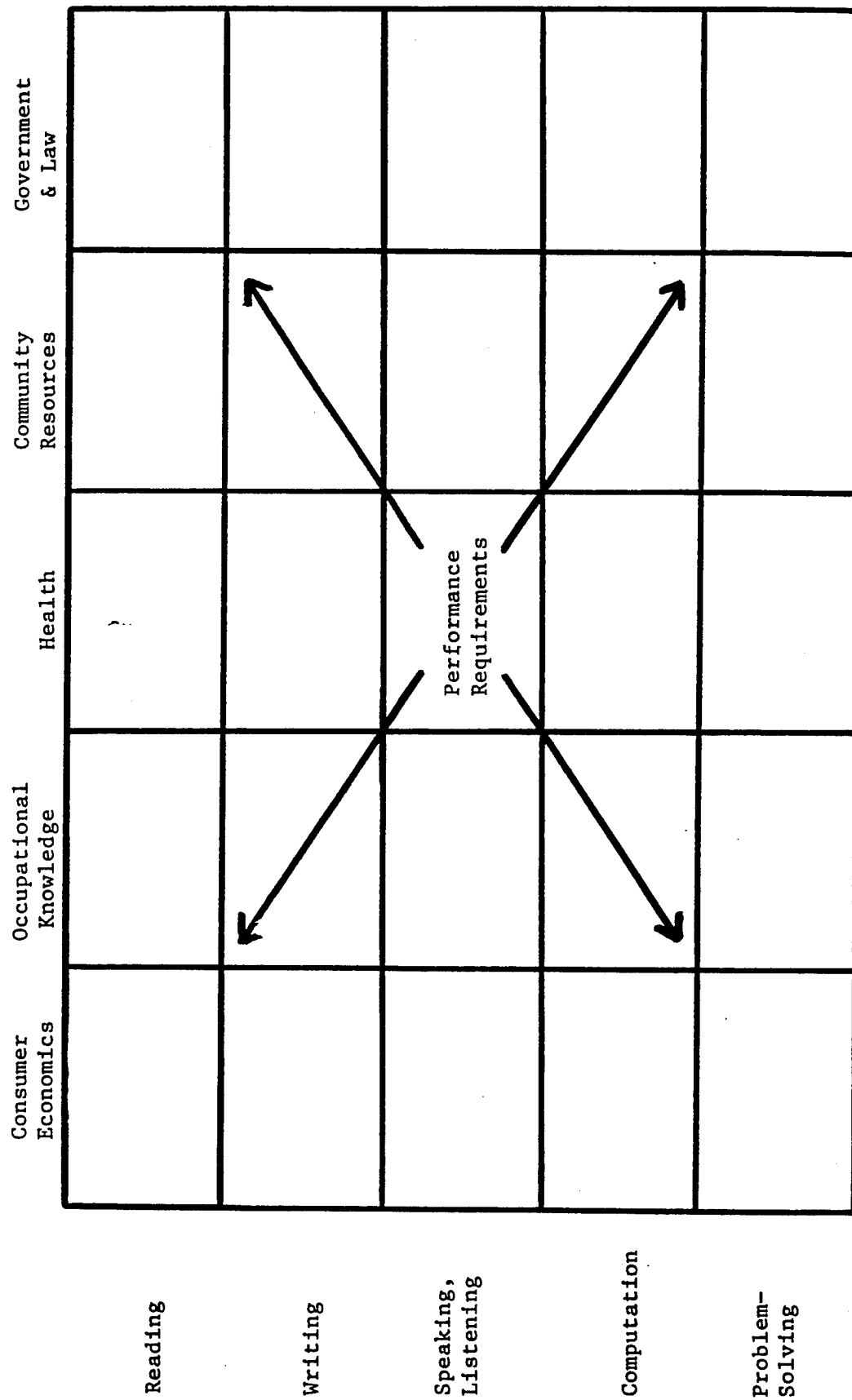
Figure 3: The Adult Performance Level Model of Functional Competency

identification, assessment and training of life skills. Spady (1977, 1978)

discusses these as follows:

1. The focus and context of competencies are real life and the diversity
    of life roles each individual occupies from day to day. Thus, Spady
    recommends that an analysis of the demands and contingencies related
    to major life roles be the starting point in developing a curriculum
    to facilitate success in adult life.

2. Because the environments, resources, regulations, individuals, etc.
    which are the integral components of daily living are continually
    changing and often troublesome, life role success requires the
    ability to cope. A competent person must adapt to difficult and
    ever changing circumstances and demands.

3. Competence requires a complex integration and application of many
    discrete skills. A competent individual taps into a pool of
    individual skills, integrates them in complex ways and applies them
    in a manner consistent with the demands of the particular situation.
    It is simple-minded to view competency, then, as merely the
    mechanical application of discrete skills.

4. This approach clearly distinguishes competencies from the individual
    capacities or skills such as reading and computational skills or
    speaking ability. These skills are the enablers or building blocks
    prerequisite to competencies.

5. While the focus in traditional curricula and even in many current
    competency-based education programs is on cognitive and manual
    skills which contribute to competency, Spady stresses that affective
    components may be the attributes which most facilitate life role

success. Competent individuals, in addition to possessing the

cognitive and manual skills needed to cope with life role demands,

must possess such affective attributes as attitudes, values,

feelings, expectations, motivation, independence, cooperation,

endurance and intuition. These affective elements must be made

explicit in a life-role oriented program since they are crucial

to successful role performance and because they are amenable to

instruction and assessment.

Spady and Mitchell developed a framework of competency expectations

(1977) which represents the range of commonalities and differences in approaches

to competency education. The rows of the model in Figure 4 consist of the

two major domains of life roles, which are not mutually exclusive but rather

are cumulative and increasingly complex from the economic domain at the top

to the social and political domain at the bottom. Life roles such as producer

and consumer are the more limited expectations most typically included in

educational programs, while roles which involve social responsibility are

more elaborate and less often found in the curricula.

	Nature of Outcome Expectations		
Life-Role Domains	Basic Skills	Decision Making, Problem Solving	Social Context Engagement
Economic	Most Basic CBE Model	(Increasing Complexity)	
Social and Political			Most Complex CBE Model

(Capacities — — — — — — — — — — → Competencies)
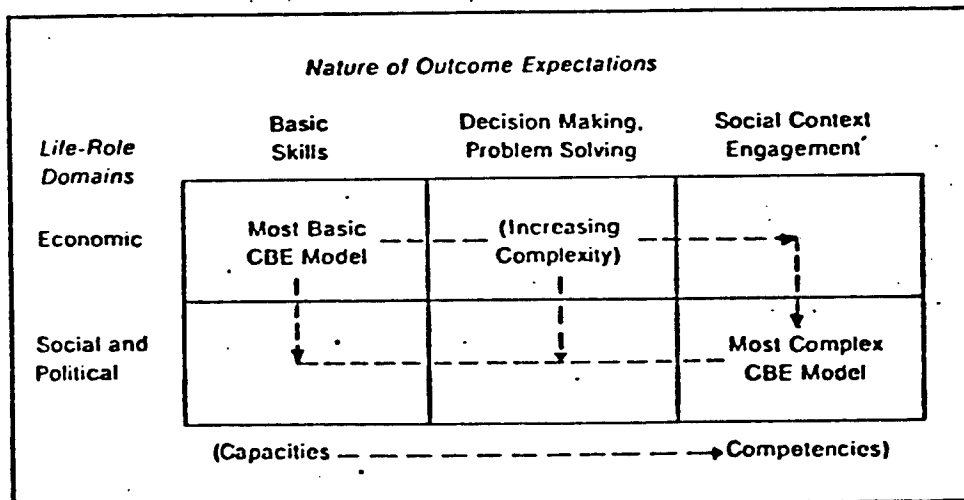
Figure 4: Spady and Mitchell's Framework of Competency Expectations

(Spady, William G. and Douglas E. Mitchell, "Competency Based Education.
Organizational Issues and Implications," Educational Researcher, Vol. 6,
No. 2, February 1977, p. 10).

The columns of the matrix represent the nature of the expected outcomes, ranging from emphasis on basic skills or capacities through a focus on decision making and problem solving to a stress on social context engagement or competencies. The continuum flows from the simplest outcomes of discrete basic skills to the complex competency outcomes which require students to apply both basic skill capacities and decision making/problem solving abilities within the social context of the given life role.

Spady and Mitchell point out that

> The closer one remains to the upper left hand cell the more
> resemblance there is to capacity-based content and (at least
> implicit) assumptions of conventional school curricula. The
> farther one moves toward the lower right hand cell, however,
> the more challenging, but alien and treacherous, the territory
> becomes, both in terms of providing facilitative learning
> experiences for actual life-role competencies and in devising
> adequate ways to evaluate them. (1977, p. 10).

Heath, who directed the California Adult Competency Survey (NOMOS, 1979), defined several technical terms for the purposes of a study which analyzed California's needs in adult basic education. The term competency was used to denote "an attribute (e.g., skill, item of knowledge, attitude) of an individual that has the potential of meeting one or more needs of that person" (NOMOS, 1979, p. 12). A competency was termed functional "when it serves to meet a need of a person with particular characteristics (gender, age, ethnic group, etc.) in a particular set of circumstances" (NOMOS, 1979, p. 12). The concept of adult functional competency within the NOMOS study was viewed as having several characteristics:

1. A person may possess competencies, but if they are not exercised they are not functional. This may be because they do not help the individual meet existing needs.

2. Two corollary notions are that a single competency may be applied

   to more than one need and, on the other hand, more than one competency

   may be called upon to meet a singular need.

3. Functional competency is more than the mechanistic application of

   isolated skills to meet needs in the biological sense. A functionally

   competent adult has a perception of reality which requires both

   objective and subjective behavior. Thus, there is an integration

   of cognitive skills such as reading or computation and affective

   attributes such as beliefs and attitudes.

4. Adult functional competency is dynamic rather than static since both

   the individuals and their environments are constantly changing. Thus,

   there cannot be an operational definition of functional competency

   which will serve all people for all time.

Heath views competency in a manner similar to White's concept of competence

(1962, 1974). Individuals who are functionally competent perceive themselves

as having power, of being "inherently capable of changing themselves and of

contributing to changes in their own social, economic, political, and cultural

environment, especially as they experience success in acquiring competencies

that meet authentic needs" (NOMOS, 1979, p. 13).

The term which Heath and his colleagues found most difficult to define

was "need". They discarded the discrepancy model most frequently used in

education in favor of a model which focuses on performance deficits. In the

former, the attempt is to determine the difference between what is and what

should be. This may be problematic in defining the goal or ideal state

since it involves value-laden positions, relies on the degree to which people

are conscious of their needs, and may confuse needs with wants. In the

performance deficit model, the performance level of individuals on a
sampling of criteria that may be presumed to correspond to competencies
functional to large numbers of adults is assessed. Accordingly, an individual
who has a performance deficit and is faced with a need for that competency,
is not functionally competent to meet that need. Functional competence
is seen only in relation to a corresponding need which is dependent upon the
person and his/her unique environment.

In developing a taxonomy of adult needs, NOMOS drew upon the theories
of Maslow's hierarchy of needs (1954) and Malinowski's premise that needs
derive from biological requirements within varying cultural contexts (1938).
They expanded upon the APL model (Northcutt, 1975) because it was seen as
being directed to competencies needed for economic success and not to the
total range of adult functioning. Five categories of needs each with several
sub-categories were used in the California Adult Competency Survey: Cultural,
Economic, Health and Safety, Interpersonal, and Socio-political (NOMOS, 1979).
The specific competencies within these categories are in Appendix F. As the
NOMOS researchers pointed out, the type of taxonomy used in any study of
adult needs or competencies depends upon the specific purposes of and questions
asked by the research.

In Los Angeles, the Adult Competency based Diploma Project of the Division
of Career and Continuing Education identified several shortcomings of previous
studies in the ways in which functional competency had been defined and
depicted (Dawson, 1977). They found the matrix developed by the APL Project
limited in several ways: (1) the static quality of the model fails to illustrate
the dynamic integration of skills vital to functional competency; (2) the
skills dimension of the matrix is limited to the common academic school skills

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and does not represent the full domain of skills needed to function effectively; (3) the dimension of content or knowledge areas uses terms related to school subjects rather than words indicative of adult life roles. Previous studies have been criticized because of their failure to take into account explicitly the value issues inherent in any definition of functional competency and the specific objectives derived on the basis of that definition (Griffith and Cervero, 1976). Dawson and her staff took these issues into account when they developed their model of functional competency (Los Angeles Unified School District, 1976). This model (as shown in Figure 5) is centered around the adult and emphasizes the role of individual values by placing "You and Your Values" in the middle of the circular model. The next circle is composed of the various categories of skills an adult is called upon to apply in meeting life role demands. These are presented in terms of the individual: You, the speaker, the listener, the reader, the writer, the computer (mathematical skills), the doer (psychomotor skills), the creator (creative skills), the problem solver, the chooser, and the interactor (inter-personal skills). The outer circle contains six areas of life roles common among adults: You, the citizen, the worker, the utilizer of leisure, the healthy person, the home and family member and the consumer. To illustrate the dynamic nature of functional competency, the circle of skill categories rotates. This stresses the notion that multiple skills are integrated and applied to competencies within each life role. This model formed the framework for subsequent activities in identifying specific functional competencies crucial to success in everyday life and in developing a total instructional and assessment program to assist adults in acquiring the identified crucial competencies.

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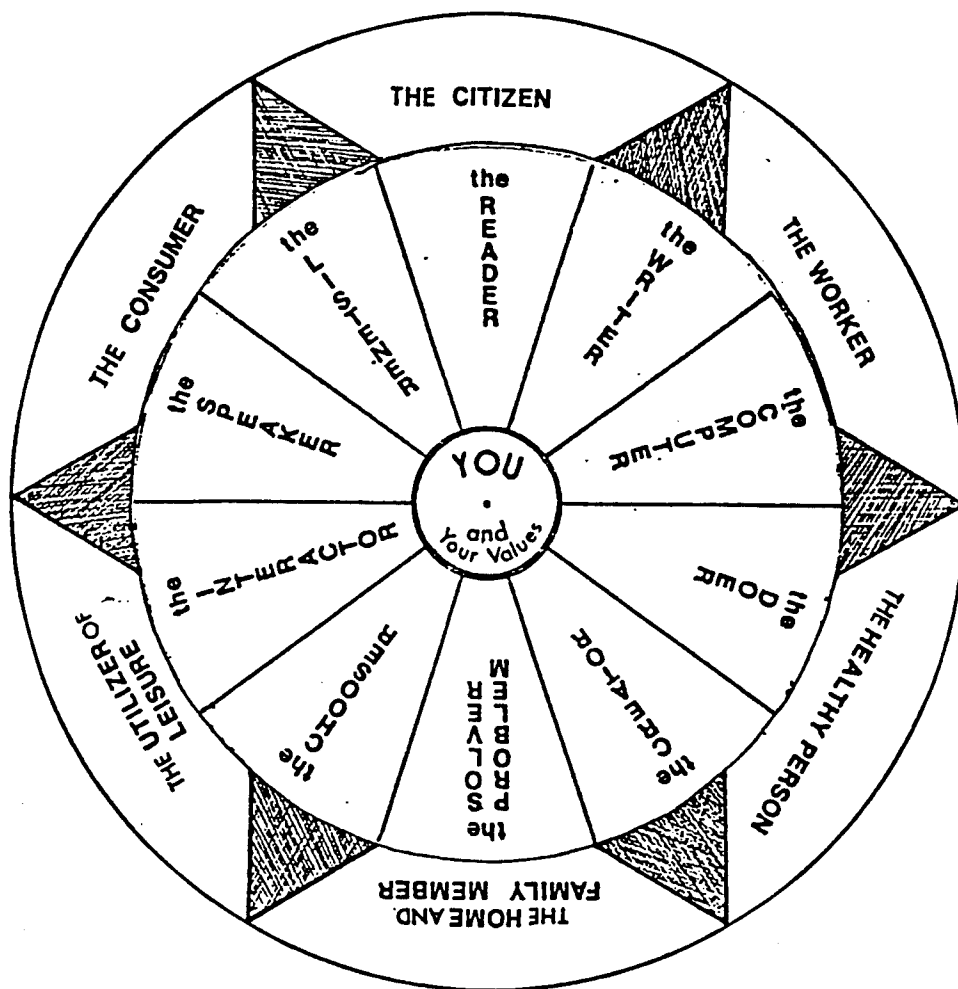
Figure 5: Los Angeles Model of Functional Competency

(Copyright Los Angeles Unified School District, 1976.
Taken from Dawson, 1977, p. 208).

There appears to be consensus as to the definitions and characteristics of several theoretical concepts related to functional competency. In some cases there are, however, variations in terminology and in the ways in which the concepts have been operationalized. For the purpose of developing a theoretical framework for the USAREUR Life Coping Skills Project, the following synthesis emphasizes the most pertinent ideas gleaned from the literature on adult functional competency.

1. Competency involves an intricate combination of knowledge, skills and affective attributes. Thus, prerequisite to competency is the possession of the basic or generic skills and affective attributes which are the building blocks of competencies.

2. Competencies are functional to the extent that they allow an individual to cope effectively with life role demands. Thus, compentencies are dependent upon the specific situations in which a person must function.

3. Because people, their life roles and their environments are in a constant state of flux, functional competency must be viewed as dynamic rather than static. This means that it is not possible to determine one set of skills/competencies which will be valid for everyone for all time.

4. Values play an important role in defining functional competency, particularly when functional competency is viewed in relation to indicators of "success". It is necessary, therefore, to address explicity the value perspective from which the competencies and indicators of success have been generated.

USAREUR LIFE COPING SKILLS PROJECT MODEL OF FUNCTIONAL COMPETENCY

In order to graphically represent the major components of functional competency, a tentative three-dimensional model is proposed for use in the Life Coping Skills in USAREUR Project. The three dimensions of the model in Figure 6 are the same main elements contained in the Model of the Coping Process (figure 2). The characteristics and parameters of the given situation confronting the individual are of major concern within the Model of Coping Process. The situation presents the person with certain, as Spady terms them, life-role demands. These life role demands can be categorized within domains. It is intended that these domains will be identified specific to the life role demands of the first term enlistee in USAREUR. The literature suggests some possible classifications which are presented in figure 6. Future Project activities will seek to verify or, perhaps, modify and expand upon these domains. Having identified domains of life role demands, it will then be possible to inventory specific situational demands within each category.

To proceed through the life coping process successfully, an individual must have a repertoire of skills from which to select, integrate and apply the skills needed to meet the particular demand. These skills comprise the second dimension of the Model of Functional Competency. There are domains of generic skills which should be among the individual's personal resources. The usual school-related cognitive skills needed for effective communication and computation are included. However, other cognitive classifications such as problem solving and decision making, as well as domains to include interpersonal manual skills need to be considered. When the domains of generic skills have been identified, specific skills which reflect the full range of Bloom's taxonomy - knowledge, comprehension, application, analysis, synthesis

GENERIC SKILLS

AFFECTIVE ATTRIBUTES

USAREUR LIFE ROLE DEMANDS
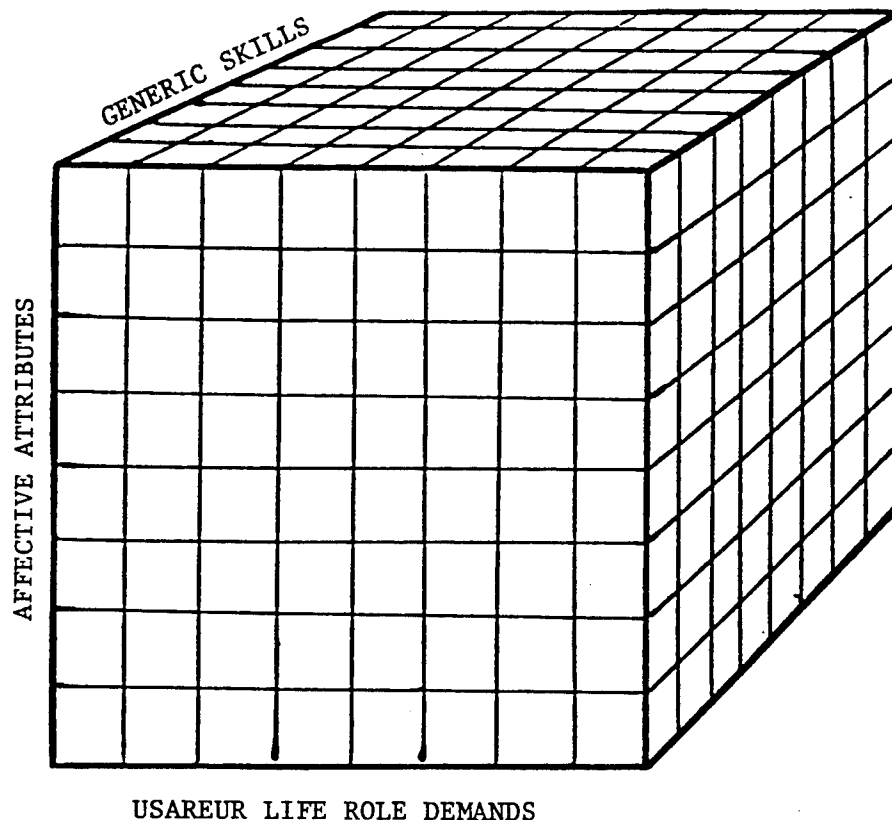
SOME POSSIBLE DOMAINS OF:

USAREUR LIFE ROLE DEMANDS	GENERIC SKILLS	AFFECTIVE ATTRIBUTES
Consumer	Reading	Values
Health (physical & psychological)	Writing	Attitudes
	Speaking	Motivations
Soldier/Worker	Listening	Interests
Citizen	Computation	Emotions
Recreation	Psychomotor	
Education	Problem Solving	
Family	Decision Making	
Social	Creative	
	Interpersonal	

Figure 6: USAREUR Life Coping Skills Project
Tentative Model of Functional Competency

and evaluation (Bloom, 1956) - can be delineated in a systematic manner.

The third dimension is composed of domains of what have been termed affective attributes. These include the values, motivations, dispositions, etc. which serve to facilitate successful coping. They are crucial components of functional competency. Rather than leave them implicit, they are given explicit importance in this model of functional competency. Again, the domains listed in figure 6 are merely exemplary of those to be identified later in the Project.

IDENTIFYING LIFE SKILLS: PROCEDURES AND OUTCOMES

Systematic efforts to identify the skills required by adults to cope

with everyday life have been part of the major competency movement in

adult education since the landmark Adult Performance Level (APL) study

began in 1971.   Federal, state, and local mandates since then have prescribed

the inclusion of life skills/functional competencies in adult basic education

and high school completion programs.   For example, the Adult Education Acts

of 1966 and 1978, the legislation of over thirty states to require demonstra-

tion of competence before awarding high school diplomas (Competency Tests,

1978), and policies by boards of education, such as in Los Angeles, to

design adult programs specifically tailored to the life role needs of adults

(Los Angeles City Schools, 1979) have set adult educators to the initial

task of specifying what skills and competencies are most critical to function-

ing effectively in daily living.   This section of the literature review

summarizes the procedures used by various projects to identify competencies,

and the general outcome of their efforts.   The lists of skills and/or com-

petencies generated by each program are included in the Appendices.

THE ADULT PERFORMANCE LEVEL STUDY

The Adult Performance Level Study which provided major impetus to the

adult competency movement in the United States and whose theoretical frame-

work was discussed earlier in this review, had two primary objectives:

(1) to specify the competencies which are functional to economic and edu-

cational success in today's society and (2) to develop devices for assessing

those competencies among adults in the United States (Northcutt, 1975).   The

model presented in Figure 3 of this paper provided the parameters for speci-

fication of objectives or general requirement statements which describe the

behaviors important to adult competency. Objectives were generated for each of the knowledge areas: consumer economics, occupationally related knowledge, health, community resources, and government and law. For each objective, situation-specific tasks were generated which were, in turn, the basis for the development of performance indicators. The 65 objectives enumerated by APL researchers are in Appendix A.

Subsequent APL activities are tangentially related to the major purposes of this review, which are to define concepts related to life coping skills and to inventory operational definitions (i.e., specific life skills). These activities, however, are pertinent to future tasks of the current project. Thus, the rest of the APL Project is outlined here to provide a complete overview of this study which has had such an impact on the field.

After the development of the performance indicators which were small simulations of what is demanded in a variety of adult-related situations, the APL project: field tested and revised the performance indicators; assessed national levels of performance by administering the performance indicators to a representative sample of adults; and determined competency levels which are associated with different levels of adult success as measured by income, job status, and education.

Overall, approximately twenty percent of United States adults were found to be "functionally incompetent" or at APL Level 1, which is associated with inadequate education (eight years of school or fewer) and low job status (unemployed or unskilled). One-third of the adults were "marginally competent" or at APL Level 2, which is associated with marginal income, nine to eleven years of education and semi-skilled to upper-level blue collar and sales job status. Not quite one half (46.3%) of the adult population was predicted to be performing proficiently at APL Level 3 which, in turn, is

associated with the highest level of income, high school completion or more, and white collar or professional job status.

Since 1975, the APL Project has built on the original research in their efforts to design, develop, implement and disseminate an adult external high school diploma program (Shelton, 1978). The instructional materials developed for this purpose are now available commercially (Harcourt, Brace & Jovanovich) and the APL External High School Diploma Program is one of the projects included in the National Diffusion Network (Shelton, 1980). Also available commercially is a set of examinations developed by The American College Testing Program under exclusive rights granted by the University of Texas at Austin (1977).

THE NEW YORK EXTERNAL DIPLOMA PROGRAM

Another effort in the area of adult life skills education took place during the same time period as the APL study. The New York State External High School Diploma Program developed at the Regional Learning Services of Syracuse, New York (Nickoe, 1974, 1975) employed somewhat different techniques to identify the life skills to be incorporated into its programs.

One component of the External High School Diploma Program is the area of generalized life skills/minimum competencies. Of prime interest to the current USAREUR life skills project are first, the procedures used to develop the list of minimum competencies and, secondly, the list of competencies itself. Initially, a task force of fourteen consultants knowledgeable in the area of adult education was paid to meet for seven sessions (38 hours) to write the first version of the minimum competencies. This version was reacted to by a group of representatives from small businesses, industry,

unions, school personnel and social agencies who attended two meetings during which they wrote comments and rated the competencies. Based upon the work of the task force and the comments of the reactors, the project staff refined the list of competencies. The end product was a list of sixty-four generalized competencies in the life skills areas of self-awareness, social awareness, consumer awareness, scientific awareness and occupational preparedness. This list is presented in Appendix B. Each candidate for the external diploma must demonstrate these sixty-four life skills competencies through the perform-ance of five tasks which center around problems in life common to adults (e.g., finding a place to live, searching for a job and making an informed consumer purchase). The specific assessment procedures used in the New York program exhibit several unique characteristics which may be relevant to subsequent activities of the USAREUR life skills project. The assessement:

- is an open-testing technique;

- is characterized by flexibility in time and location of testing;

- utilizes oral as well as written communication modes;

- presents the candidate with explicit information about requirements;

- provides continuous feedback on progress;

- forces candidates to use both human and community resources;

- structures the test environment as closely to reality as possible.

ADKINS' LIFE SKILLS EDUCATION PROGRAM

Winthrop Adkins (1970, 1973) as director of the Life Coping Skills Project at Teachers College, Columbia University, sought to develop an adult education program which would prepare the adult learner for coping more effectively with the many problems in living. He views these problems as

complex in nature and composed of interrelated psychological, social, familial, medical and other factors. The Adkins Life Skills program begins with the identification of problems collected by interviews and discussions with members of the target group primarily, but also with graduates of adult education programs, employers, teachers, counselors and other informed individuals. Adkins' central idea is that most of the data should come from members of the target population. The problems are then categorized and broken down into smaller units of behaviorally stated tasks and subtasks. One distinction between the Adkins' approach to life skills and that of other projects (such as APL) is the emphasis Adkins places on psychological and social problems of living. Adkins' categories include: Developing One's Self and Relating to Others; Managing a Career; Managing Home and Family Responsibilities; Managing Leisure Time and Exercising Community Rights, Opportunities and Responsibilities. Some of the representative curriculum units which relate to problems in each of these clusters are in Appendix C.

THE STATE OF OREGON ADULT DIPLOMA REQUIREMENTS

Since 1978 the state of Oregon has required persons over compulsory school age to demonstrate competence in six life roles before receiving an adult high school diploma. These six roles and the general goals related to each are presented by the State Department of Education as follows:

> Every student shall have the opportunity to develop to the best of his or her ability the knowledge, skills and attitudes necessary to function as a (an):
>
> (a) "Individual": to develop the skills necessary for achieving fulfullment as a self-directed person; to acquire the knowledge necessary for achieving and maintaining physical and mental health and to develop the capacity of coping with change through an understanding of the arts, humanities, scientific processes, and the principles involved in making moral and ethical choices;

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(b) "Learner": to develop the basic skills of reading, writing, computing, spelling, speaking, listening, and problem-solving; and to develop a positive attitude toward learning as a lifelong endeavor;

(c) "Producer": to learn of the variety of occupations; to learn to appreciate the dignity and value of work and the mutual responsibilities of employees and employers; and to learn to identify personal talents and interests, to make appropriate career choices, and to develop career skills;

(d) "Citizen": to learn to act in a responsible manner; to learn of the rights and responsibilities of citizens of the community, state, nation, and world; and to learn to understand, respect and interact with people of different cultures, generations and races;

(e) "Consumer": to acquire knowledge and to develop skills in the management of personal resources necessary for meeting obligations to self, family, and society;

(f) "Family Member": to learn of the rights and responsibilities of family members, and to acquire the skills and knowledge to strengthen and enjoy family life. (Quoted by Norris in Kasworm and Lyle, 1978).

These broad categories were the basis for the specific requirements of the Oregon adult program. The forty-five common core competencies through which adults demonstrate their ability to function effectively in the six life roles are included in Appendix D.

THE LOS ANGELES COMPETENCY BASED EDUCATION PROJECTS

In the work done by the Los Angeles Project, whose model of functional competency was presented previously, some of the procedures used to delineate and prioritize the competencies differed from those of other studies. In an attempt to deal in a straightforward manner with the values issues involved in competency identification and also to include the people for whom the program was being developed in the identification process, the following steps were taken (Dawson, 1977).

1. A pool of functional competencies was developed which drew from existing sources, such as APL (University of Texas at Austin, 1975), New York External Diploma Program (Nickse, 1975), Oregon Graduation Requirements (Fassold, 1974), and existing curriculum materials from state and local sources. Statements were compiled, reviewed, revised and added to by project staff and subject matter experts in order to provide a wide range of competencies which were comprehensive to the life roles identified in the model. No evaluation of importance was done at this stage.

2. Sample performance indicators or tasks illustrative of the ways in which a learner might demonstrate a competency were written.

3. Four hundred fifty-seven participants (adult school students, teachers, administrators and community members)

    a. rated each of sixty randomly assigned competencies on a four-point scale by sorting them into envelopes labeled: (1) don't include; (2) could include; (3) should include; (4) must include.

    b. completed Rokeach's Value Survey (1967) in which they rank-ordered two sets of eighteen values according to importance in their own lives.

4. Data analysis pertinent to this review concerned (1) the systematic variations in educational priorities among adult education teachers, administrators, students and community members as well as differences based upon sex and ethnicity and (2) correlations between expressed values and educational priorities.

    a. Overall main effects on the competency ratings were significant for group and ethnicity, but not for sex.

b. Although there were statistically significant differences in the ratings assigned to some competencies, the various groups tended to assign their highest ratings and their lowest ratings to similar competencies.

c. Basic life support and survival skills required for physical and financial security were consistently of highest priority. Competencies related to leisure were of lowest priority.

d. Relationships were found to exist between expressed values and educational priorities. These relationships took the form of intricate networks in which clusters of values were associated with one or more competencies.

e. The relationships between values and educational priorities while statistically significant, do not allow for making inferences from known values to educational priorities or vice versa.

The overall rankings of the 139 competencies are included in Appendix E.

Utilizing the same list of 139 competencies, a different question was asked of representatives from vocational education, business, industry, employment-related organizations and employed and unemployed adults in Los Angeles. For each statement a rating was assigned according to the respondents' perception of its importance to job success. It was hypothesized in the Life Skills for Job Success Project (Dawson, 1978) that many people who are competent or even proficient in skills strictly related to job performance are not successful in the world of work. This may be because they are incompetent in the everyday life skills which affect a person's ability to complete vocational education programs, to enter the labor force, to retain a job, to advance on a job, or even to be satisfied as a worker.

Statistical analysis determined that there was very high overall agreement in the competency ratings among the various groups sampled in the survey (N=289). The rank order of the competencies according to their perceived importance to job success is given in column II of the List of Functional Competencies from the Los Angeles Competency-Based Education Projects in Appendix E.

Although the content of a study completed by Dawson (1976) was strictly functional literacy (i.e., reading) skills, the methodology used to arrive at instructional priorities among them took into account the multiple factors which comprise "criticality". Sixty types of everyday reading (e.g., rental applications, labels, want ads and utility bills) were divided among four forms of the Reading Evaluation Survey. For each type of reading, the adult education survey respondents rated (1) its degree of past use, (2) its degree of anticipated use, (3) its perceived level of importance, and (4) whether (and when) formal instruction had addressed it. In addition to separate rank orderings based on each of the first three questions, a priority index was developed which took all three factors into account simultaneously. Thus, a priority index matrix (see Figure 7) was constructed. Each type of reading was placed in one of the four cells:

    #1 – high importance and high use (e.g., food labels and newspaper
        articles

    #2 – high importance and low use (e.g., voter registration applications
        and traffic tickets)

    #3 – low importance and high use (e.g., TV guides and want ads)

    #4 – low importance and low use (e.g., stock market reports and weather
        maps)

Data obtained from the fourth question asked about each type of reading coupled with performance information from the same respondents on thirty of the types

	Importance	
	High	Low
High	Priority #1	Priority #3
Low	Priority #2	Priority #4

Use

Priority #1 – high importance and high use

Priority #2 – high importance and low use

Priority #3 – low importance and high use

Priority #4 – low importance and low use

Figure 7: Example of a Priority Index Matrix

of reading as measured by the Senior High Assessment of Reading Proficiency (Los Angeles Unified School District, 1976) had implications for curricular and instructional planning. Combinations of low percentages of students performing the skill correctly plus a high priority rating plus low curriculum coverage (answers to #4) indicated areas of prime concern. Some of the types of reading which had this combination of factors were bank statements, utility bills and road maps.

This particular technique addressed several issues inherent in attempts to identify objectives, whether they be skills or competencies:

1. There are several variables to consider in determining the relative overall "importance" of skills or competencies. As in other studies conducted by Dawson (1977) and others, the questions asked about given-skills determine the resulting rank order of those skills. This may appear too obvious to mention, but in many studies the questions asked are not explicitly stated and in some cases no explicit questions were asked of the individuals responsible for identifying and rating/ranking skills or competencies.

2. Indications of priorities (based upon any factor) do not in and of themselves lead to the conclusion that training/instruction is needed in highly ranked skills or competencies. Actual performance data are required to determine where deficiencies are. Important skills already possessed do not have to be taught.

FUNCTIONAL LITERACY IN THE MILITARY

Other research which also focused on functional literacy and which has some implications for the current project was conducted by Sticht from 1968

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through 1974 for the Human Resources Research Organization (Sticht, 1974).

The objectives of a series of research projects were to (a) study and develop

methodologies for determining functional literacy levels of military jobs

within the Army; (b) explore techniques for reducing reading demands of jobs;

and (c) develop a prototype literacy training program designed to provide

a level of functional literacy appropriate to present minimal job reading

requirements.   From an applied perspective:

> Knowledge about reading demands of jobs can be used to better match reader and jobs through the three strategies mentioned earlier: assigning marginal readers to jobs with the least demand for reading; improving reading abilities of personnel to bring their skill levels up to the job reading requirements; and redesigning jobs and job training programs to reduce the level of reading skills needed to successfully perform the job.   (Sticht, 1974, p. 8).

Four different methods to estimate reading demands of Army jobs were

utilized:

1.   A "judgemental" approach whereby the assessment of reading require-

ments of jobs is done by job analysts.   The level of General Educational

Development (GED) required for each job is estimated on the basis of both

interviews with job incumbents and supervisors and observations of the job

while being performed.   Consequently each job is categorized into any one of

six GED levels which roughly correspond to schooling levels.

2.   A "summary task statement" approach whereby job analysts summarize,

in a statement form, the literacy demands of jobs.

3.   An application of readability formula approach whereby the average

reading grade level for a sample of job reading materials is computed and

is used to indicate the reading requirements of the job.

4.   A psychometric approach whereby performance on a reading predictor

task is correlated with performance on a job proficiency criterion test to

predict who will reach an acceptable level of proficiency.

Although the scope of this work was limited to on-the-job reading skills rather than to the full spectrum of skills required for off-duty as well as on duty demands, the techniques used may have applicability in identifying the skills needed to cope effectively within the USAREUR environment. There are also implications for future project tasks; namely, (1) What can be done to reduce the difficulty of the demands imposed by the environment? and (2) What type of training program will have the greatest likelihood to provide first term enlistees with crucial coping skills?

A NATIONAL DELPHI STUDY

As part of a delphi study on selected issues in completency-based adult education (Taylor, 1978) state directors of adult education, Division of Adult Education (USOE) staff and other invited participants (e.g., adult and non-adult educators, board of education memebers, and legislators) expressed their opinions related to the issue: How may the competency needs of adults be determined of identified? Table 1 presents the mean scores for a series of statements which were rated on a Likert scale (1=strongly agree through 5=strongly disagree).

Relevant to methodological issues in identifying life skills/competencies for the current USAREUR Life Coping Skills Project are several items in Table 1. Respondents thought that

- surveys of competencies should be compared with the APL listing.

- competency needs may be determined by a needs assessment survey, through testing adults and through the cooperation of various agencies and organizations.

- competency needs must be determined through multiple approaches which include taking into account the needs of individual adults,

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TABLE 1

HOW MAY THE COMPETENCY NEEDS OF ADULTS
BE DETERMINED OR IDENTIFIED AT THE STATE LEVEL?

ITEM	$\overline{D}$*	$\overline{IP}$**
Competency-based surveys should be checked against those competencies nationally identified in the APL	2.54***	2.18***
Competency needs of adults may be determined or identified at the State level by:		
a. annual program reports.	3.24	3.09
b. Statewide survey-needs assessment.	2.15	1.94
c. resource centers.	2.51	2.33
d. State advisory groups.	2.90	2.50
e. testing of adults.	2.22	1.96
f. cooperating State agencies and organizations	2.39	2.31
The competency needs of adults cannot be determined at the State level.	3.41	3.19
Competency needs of adults must be determined:		
a. at the local level.	1.81	1.69
b. at the local level and consolidated at the State level.	1.92	1.98
c. by target populations	2.44	2.43
d. on an individual student basis.	1.43	1.80

*Delphi group. State Directors and Division of Adult Education staff.

**Invited Participant group.

***1=Strongly Agree; 2=Agree; 3=No Opinion; 4=Disagree; 5=Strongly Disagree

the needs specific to a given locality and needs which are common at more comprehensive levels (e.g., state).

- competency needs assessments must include participation by the target populations.

SUMMARY

From an examination of even the few exemplary studies reviewed in this paper, it is obvious that there are many more commonalities than there are differences among the lists of competencies generated by diverse projects. Fischer analyzed many studies and determined that "for the most part . . . the differences in various lists are in titles, emphasis, and organization. Many of the same tasks or aspects of competency are common to several lists, though their placement within the lists varies" (Fischer, 1978). Lorack did a similar analysis which revealed that the top 100 competencies were generally the same in over 90 percent of the cases (Ririe, 1980). Differences which do exist have to do with (1) the level of generality/specificity with which the competencies are stated, (2) the characteristics of the target population and (3) the purposes of the program (e.g., basic education, high school completion or vocational education). The fact that variations do exist highlights the need to carefully select the procedures to be used in identifying life skills for a given program; that is, the methods to be used, the questions to be asked, and the participants in the process.

The studies presented in this review are illustrative of the procedures and results of numerous other projects which accomplished similar objectives. With regard to procedures, several approaches, either singly or in combinations, have been used to identify life skills/competencies. Each of these approaches is discussed below.

1. Reviewing existing literature and data

Almost every project was begun by looking at previous related work. This allows for the improvement and/or expansion of the state of the art and avoids the proverbial reinvention of the wheel. However, it usually is not sufficient to rely solely on existing work. Each project differs in some ways from prior studies. The major purpose of the project, the population of interest or other aspects vary. Therefore, typically one or more of the following techniques is used with guidance from the relevant concepts derived from the literature review.

2. Asking "experts" what skills/competencies they think adults need to possess

Among the experts whose opinions have been sought are individuals who provide services to adults, representatives of organizations and agencies which interact with adults in various ways, and specialists in the fields of education, employment, psychology and medicine. In some instances, these expert opinions were solicited in individual interviews; other times, groups of experts convened to express their ideas.

Much valuable information can be obtained from people who interface directly with the adults who are the target population. They have first-hand knowledge not only of what skills contribute to successful functioning vis-a-vis their scope of interest, but also are aware of the most problematic areas in which adults are deficient in the necessary skills.

The data collected from this technique must be viewed, however, with the following caveats in mind:

a. The experts tend to have a narrow perspective which reflects their area of specialization.

b. The experts' perceptions of the needs of others are influenced strongly by their personal and cultural values. It is necessary to determine the congruence between their values and those of the target population and also those of the sponsoring agency.

This technique has been useful in relating general information gathered from the literature to the specific area of interest (i.e., the particular needs of the target population).

3. Asking adults within the target population directly what they think they need to know and be able to do

Increasingly there is the belief that curriculum decision making should be democratic; that the people affected by decisions (students, educators, parents and society) should have a share in making the decisions they will have to live by. Adult students can and should play a major role in determining their needs, and as a result, the goals and objectives of the program. By going directly to the target population, it is possible to find out what concerns and troubles them. When these needs are translated into an instructional program, the objectives should be perceived as relevant by the target population and, therefore, motivate them to learn.

Cautions in using this technique should be taken because:

a. Some adults are not aware of their needs. They lack the knowledge and skills prerequisite to assessing which skills they need in order to meet various demands and which of those skills they lack. They may not even be aware of a problem.

b. Many adults will require assistance in articulating their perceptions. They may have difficulty in responding to general open-ended questions either orally or in writing.

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c. The value orientations of members of the target population must be recognized. These may be the same as or different from those of the sponsoring agency and/or others whose opinions have been sought.

4. Open-ended versus reactive techniques for eliciting information

Whether the source of information is experts or members of the target population, opinions can be elicited in one of two general ways or through a combination of the two. On the one hand, open-ended questions, from quite general to very specific can be asked of the respondents; for example, "What problems have you (have your clients) had recently?" or "In the area of health care, what skills do you think an adult needs in order to make use of services in USAREUR?" As with any type of data generated in this way, analysis and interpretation can be time consuming and difficult. However, if there is nothing to which individuals can react, if new and novel ideas might be expected, or if perceptions unaffected by the ideas of others are sought, this type of questioning is called for.

On the other hand, it is possible to ask the respondents to react to pre-specified statements. In order to identify the competencies/skills for a new program, experts and members of the target group can give their opinions of a set of competencies/skills which have been derived from existing sources. This can be by way of rating, ranking or discussion. This allows for easier analysis and interpretation and also may be less demanding of the respondents.

5. Performing a task analysis of what adults need to be able to do in various life role activities

It is possible to analyze what people do in meeting life role demands. The major tasks can be broken down into subtasks. The competencies and skills

needed to perform these tasks and subtasks can then be identified. Project

staff can perform such a task analysis or the experts and target group

members can be asked to analyze specific tasks.

6. Collecting performance data from the target population in order to determine skill deficits

Generally, this technique is employed after the skills/competencies

judged to be important to a large percentage of the adults in the population

of interest have been identified. Through diverse testing methods, an

assessment of the extent to which individuals and groups possess the specified

skills/competencies can be made. In order to develop such instruments, the

statements of skills or competencies need to be operationalized in terms of

performance indicators. Then items must be developed which will validly

and reliabily assess those performances. Two major types of instruments

are used: paper-and-pencil and applied performance tests. The former have

advantages related to ease of construction and administration, but dis-

advantages related to the adequacy with which they can assess many life role

competencies. Thus, a combination of testing procedures is needed if accurate

assessments are to be made. Paper-and-pencil tests can be used for performances

for which they are suited, while tests that measure performance on tasks

requiring the application of skills in an actual or simulated setting must

be also incorporated in any assessment.

This technique is utilized for two purposes. First, just because a

given skill or competency is viewed as important is not reason to provide

training on it to everyone in the target population. Only those individuals

lacking the skill need training. If large numbers of the adults already

possess the skill, it will not be a training priority. Second, resources

available for the development and implementation of any training program are limited. Thus, in order to make the most effective use of scarce resources, priorities need to be established which take into account both importance and current levels of performance.

This summary stresses that a variety of techniques have been and can be used to identify the skills/competencies which will be the objectives of an instructional/training program. Each technique has its advantages and disadvantages and potential for problems. Therefore, past efforts have used multiple methods to derive valid and reliable information.

This review of the literature will assist the Life Coping Skills in USAREUR Project in determining the skills most important for first-term enlistees in USAREUR. Previous sections have been concerned with first theoretical issues and then the application of theories within the civilian sector. The next section summarizes the literature which is specific to the military and USAREUR. This section will be of assistance in applying the theories, models and practices to the task of identifying the skills required by first-term enlistees to cope successfully with their life role demands within USAREUR.

LIFE COPING IN USAREUR

One of the objectives of this report is to investigate the various demands which contribute to successful adaptation to USAREUR. Such an investigation focuses on the following questions:

- What are the characteristics and parameters which define the USAREUR specific environment in which the service member must cope?

- What are the particular requirements/demands imposed on service members in life situations occurring in USAREUR?

- What life coping skills and other personal attributes are needed to meet these demands?

- What environmental resources are available to assist the soldier in coping with the USAREUR environment?

These questions which are derived from the theoretical framework presented in earlier sections of this report, have not yet been fully addressed in a systematic way. The studies available, however, are instrumental in indicating major problem areas in which coping is frequently stressful and unsuccessful, as well as in suggesting particular issues relevant to successful adaptation to USAREUR. From a systemic point of view successful adaptation ought to result in a decrease in attrition rates, disciplinary problems, occurrances of physical and mental illness and in an increase in reenlistment rates, especially among first-term enlistees in USAREUR. From the individual service members's point of view, successful adaptation to USAREUR should be indicated by positive attitudes toward USAREUR and the military in general, satisfaction with job, satisfactory personal and on-the-job relations,

positive sense of self and physical and mental health. These, as the model of the coping process suggests, are affected by the ability of the individual service member to successfully--effectively and satisfactorily—meet the daily on and off the job demands encountered in USAREUR. Personal abilities and affective attributes are major factors in the process of one's confrontation with demands. When demands are difficult to meet or when the individual does not have or cannot utilize all the personal and environmental resources needed in order to meet the demand, the role that these factors play in the life coping process is especially evident.

INDIVIDUAL ABILITIES AND AFFECTIVE ATTRIBUTES

The inability of a significant proportion of enlisted personnel to meet performance standards and manage their personal affairs has been found to be primarily related to educational levels below the minimally desirable level of high school or its equivalent (Melching, et. al., 1972). High school dropouts have consistently scored lower than soldiers of all other educational levels, including eight years of education or less, on achievement tests which pertained to tasks of handling money, insurance, legal problems, health and buying. Furthermore, the results of the study showed a strong correlation between errors on the achievement test and poor attitudes toward salespeople, spending, soliciting help, relationship with supervisors, family and peers as well as individual responsibility.

Other personal attributes, and past experiences which affect service members' performance have been explored by Worthington (1976). The ability of soldiers to cope seems to be largely determined by the adaptive resources they bring with them to the military environment.

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In his study of soldiers who had received administrative discharges from the Army, Worthington (1976) identified the reasons for these soldiers' referrals for counseling prior to discharge, as indicators of coping problems. Manifestations of anxiety, a strong wish to get out of the Army, family problems, maladjustment to unit, and somatic complaints were the most frequent reasons for the referrals. Counselors' reasons for discharge recommendation were primarily those of immaturity, maladjustment and anxiety, behavioral disorders and depression. When compared with a group of soldiers who were identified as successful, i.e., those who successfully completed BCT and AIT, Worthington found a higher incidence of personal histories which included very poor adjustment or coping resources among the unsuccessful enlistees:

> Families failed, marriages broke down, schooling was seen as nonproductive and terminated early, life prior to entrance in the Army was seen as unsuccessful. Life after entrance on active duty was no better; failure occurred again. (Op. cit., p. 9).

Preliminary findings from a longitudinal study (Orend, 1979) which is still under way show that between 25 percent and 42 percent of first-term enlistees have had some history of indicators of maladjustment such as running away from home, suspension from school, incompletion of schooling. These may also be possible predictors of maladjustment in the Army. Over half of the respondents also indicated they were experiencing some problem at home at the time of the survey. Interestingly, first-tour soldiers were found to have had fewer problems adapting to a foreign culture and to the Army than did second-tour soldiers though the latters' demographic characteristics had, historically, been related more positively to adaptability than the demographic characteristics of the first-tour soldiers (Owen,

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Bussey and Whittenberg, 1980). This finding may be explained by the decreasing rates of morale over time among enlistees as indicated by this data.

Manning and Ingraham (1978) found no significant difference between the demographic characteristics of discharged enlistees and other junior enlistees. The fact remains, as their findings show, that most discharges were attributed to reasons of lack of attitude, lack of motivation, lack of self-discipline and inability to adapt socially or emotionally. The authors tend to explain such problems in terms of unit morale and cohesiveness as it relates to the kind of social support soldiers receive in their unit. Maintaining personal relations as an indicator of successful adaptation involves the maintenance of social support. Thus, what this social support entails in terms of adaptive resources it provides the individual service member needs to be explored further.

SITUATIONAL AND ENVIRONMENTAL PARAMETERS

The parameters of the military/USAREUR environment need also to be defined, especially those which are related to coping problems and which necessitate particular USAREUR-related coping skills.

The identification of areas in which USAREUR personnel are experiencing problems and the relationship of such experiences to unit readiness, reenlistment and rates of attrition have been a subject of various studies. The problem areas most often cited are family problems, low ability personnel, motivation, morale, drug and alcohol use, discipline, race relations and job satisfaction (see HRDD, 1978; Moskos, 1977; Manning and Ingraham, 1978). Though most of the studies specify what are the particular problems, the characteristics of the military environment in general and that of USAREUR in

particular are used as explanatory conditions. Among these characteristics are
separation from home and a long overseas tour, as well as an encounter with
an unfamiliar foreign culture which many first-term enlistees cannot fully
experience and enjoy due to low pay levels, the value of the dollar on foreign
markets, and the lack of knowledge of the local language (Moskos, 1977; Orend,
1979). These enlistees are not tourists in Germany, they have to live, work,
and create some fulfilling existence for themselves. Thus their encounter with
the foreign country is different than if they were there temporarily as visitors
(Kagitcibasi, 1978). On the other hand, the enlistees are members of an
organization possessing a particular structure and mode of operation, one
which is not really geared toward assimilating the soldiers into their foreign
environment. In fact it may contribute to the isolation of the soldier from
the civilian. High self-esteem and the right attitudes toward the military
would enhance the adjustment of these soldiers to their military environment.

Similar situational characteristics are depicted by Abbott (1980) in
his article about the life of the single soldier in USAREUR. The break
from civilian life introduces problems of coping due to loss of privacy,
the elimination of choices regarding where and how to live, and the subjection
to regular inspections which the soldiers see in terms of being treated like
children. Abbott points out that morale among barracks soldiers is low
because of these conditions. These service members are frustrated, under
stress and tensed, and show signs of helplessness--a sense of inability
to control their private lives. Coping with the situation takes the form
of assisting each other in having some privacy (rotating among them their

time spent in the barracks, covering for each other's visitors of the opposite sex). The emergence of support groups as a product of coping efforts highlights another, possibly very crucial, environmental parameter. That is, the informal peer groups which are quite likely to be composed of people who due to shared circumstances spend time together, but who under other circumstances may not become friends at all. Choice of friendships in the military environment may not be as free as in civilian life. Furthermore, members of such groups place upon each other pressures to conform. Consequently, peer groups may "enforce" behavior patterns of which the military authorities do not approve--behaviors such as drug use, drinking, AWOL behavior (see Ingraham, 1978, study of barracks residents). Such groups tend also to develop anti-military attitudes which may contribute to the reluctance of soldiers to fully commit themselves to a military career. It may very well be, however, that if coping with military life were less problematic, the effects of support groups would be less contradictory and result in greater adjustment and commitment to the military.

The importance of informal support groups to coping is suggested by Moskos (1977) who emphasizes that separation from the American culture, family and friends is a crucial factor in maladjustment and coping problems. The USAREUR environmental context not only contains unfamiliar elements but also lacks the supportive networks so important to successful coping (see also Warren, 1978).

ORGANIZATIONAL AND ENVIRONMENTAL RESOURCES

It is not likely, however, that the particular characteristic of the military organization and environment will change. On the other hand, it is possible to enhance service members' coping with the more problematic areas of their military life. The organizational resources that are available to and possibly helpful to the soldiers in overcoming their adjustment problems--in particular community services, orientation to USAREUR and Germany--constitute another environmental factor in coping and adaptation to USAREUR. The provision of the information depends greatly on the organization of the delivery of the information, as the following example demonstrates.

One of the major avenues used by the Army to introduce first-term enlisted personnel coming into USAREUR to their new environment is the Soldier Orientation and In-Processing (SOI) system. An evaluation of an experimental SOI program in the 21st support command communities in comparison to the more traditional SOI programs in the Seventh Corps was conducted by Bonner and Miller (1978). The results showed that not only did the experimental program informed more of the incoming personnel about activities and also accomplished available than did the comparison program, in-processing was accomplished significantly faster in the 21st SUPCOM communities than in the Seventh Corps. Both personnel and unit staff in the 21st SUPCOM communities rated their community-based SOI program significantly higher than personnel in the Seventh Corps. Reaching greater numbers of incoming personnel and accomplishing the in-processing phase effectively and in a relatively short time may have positive effects on the soldiers' attitudes toward work role, co-workers, supervisors, the USAREUR environment and Germany in general. Furthermore, soldiers' motivation to meet the demands with which they are

confronted upon arrival to USAREUR is likely to increase as a result of informative, effective orientation and in-processing. However, other studies have indicated that information regarding life in USAREUR, on and off duty, is not reaching everyone.

A pilot longitudinal study conducted by the Army Research Institute (ARI) Field Unit in Heidelberg, Germany, have yielded some important results relevant to potential coping problems primarily due to inaccessibility to information about USAREUR. Considerable percentages of in-coming personnel have not received critical information about living and working in Germany. Over half of the respondents have not been assigned to sponsors six weeks after arrival to USAREUR, though sponsorship programs, which were designed to facilitate smooth tranistion of the service members into life in Germany and USAREUR, were perceived by those who had sponsors to be good and helpful. Likewise, high percentages of new service members had not received information or orientation on community life support activities though these too were perceived to be helpful (the results are discussed in Owen, et. al., 1980). Preliminary results of a subsequent longitudinal study of adapability to USAREUR which has been conducted by Human Resources Research Organization (HumRRO) confirm the results of the previous ARI pilot study (Orend, 1979).

The specific requirements, demands and tasks which first-term enlistees encounter upon coming to USAREUR and throughout their stay in their newly assigned environment are numerous. Though generally they may not differ from requirements service members have to fulfill in CONUS, the context in which such requirements are presented and the defined or prescribed ways to meet them are different than that in CONUS. This is primarily due to the fact that the military community is organized differently in USAREUR

than in the States; and both the German economy and community are unfamiliar to the newly arrived service member. It takes more than just knowing the language to handle one's affairs off duty and off post. Local customs, traditions and manners are different and often operate on different principles than the American service member is accustomed to. Adjustment to such novelties often involves a change in one's way of perceiving things, and acceptance of the existence of different, often contradictory, attitudes, meanings and beliefs. One aspect of not being a tourist in Germany is that the soldier has to accommodate to the local culture, a process which is by no means easy.

The Soldier in Europe study (Orend, 1979) which is still under way will be a major source of data which pertain to possible problems first-term enlistees encounter in their contact with the German culture, people, economy and authorities. Preliminary results show that 92 percent of first-term enlistees do not know German upon arrival to Germany and being able to talk to the German people is the most serious problem these soldiers expect to have in Germany. In the course of living in Germany, they also must be able to drive or use public transportation, possibly attain housing on the economy, find recreational activities in part on the German economy and so on.

Even when American military facilities may be available to service members for most of their needs, the use of the facilities may still present problems to first-term enlistees. Melching, et. al. (1972) have shown that soldiers with low education level scored poorly on achievement tests in regards to personal affairs--handling money, insurance, legal problems, health and buying. The problems may be much more widespread than indicated

by these findings. Moreover, a detailed account of daily requirements which may present problems is needed. Such a list should include all facets of life in USAREUR—job and non-job related.

Basic requirements refer to becoming familiar with the organization (the Army, one's unit and job, community services) and the civilian environment (the German culture, authorities, geography, etc.); acquiring MOS-related skills not acquired previously in CONUS; establishing working relations with peers and supervisors; and handling emotions, particularly the stress, which accompany abrupt changes and being exposed to unfamiliar situations. More specific requirements refer to the particular tasks which need to be accomplished to insure successful assimilation to one's unit, the obtaining of necessary services and satisfactory daily existence. Some of these specific requirements are the acquisition of knowledge and skills to pass the SQT's, accomplishing tasks toward promotion, keeping a budget, saving money, maintaining one's health, taking care of family, maintaining friendships, pursuing recreational activities, traveling and so on.

Meeting these requirements, coping with them, is expected to be related to successful adaptation to USAREUR from both the individual's and the military's perspectives.

INDICATORS OF ADAPTATION TO USAREUR

Several studies have focused on morale, job satisfaction and motivation as the primary factors of unit readiness and job performance, as well as to successful adaptation to USAREUR. These factors were also related to problems of attrition and low rates of reenlistment.

The Army Research Institute's pilot study which was mentioned before, has yielded results which have related implications for successful adaptation

to USAREUR. The result showed that reported morale among enlistees in their first tour to Europe decreased over time. Morale rates were used as the primary indicators of adaptability to USAREUR. For service members who were surveyed after six weeks in USAREUR, morale was highly correlated with their experiences during in-processing. However, after service members had been in USAREUR for a few months, morale was found to be correlated with organizational factors such as unit climate, supervisory leadership, co-worker interaction, work group processes and job satisfaction. The data, however, is incomplete and not all factors were studied at each phase (upon arrival, after six weeks, three months and nine months). Data regarding reenlistment plans of first-term enlistees revealed that plans to reenlist became less decisive over time while plans to leave the Army were reported by a higher percent of enlistees after nine months of duty in USAREUR.

The incongruency between pre-enlistment expectations and actual experiences in the Army was found to be the major determinant of lack of job satisfaction (Chisholm, et. al., 1980). Attitudes toward the Army which are formed prior to enlistment change considerably as a result of such incongruency. In the concluding discussion of their study on job satisfaction of first-term enlistees, the authors associate rates of attrition and turnover with satisfaction on the military job. Though the problem is seen mainly as a motivational one, an increase in the extrinsic rewards to enhance motivation to join the military and reenlist is not sufficient. The authors emphasize the need to continue and improve educational benefits and job related skill training in order to avoid the consequences of unrealized expectations.

This study highlights the effects an individual's perceptions (or expectations) of what a new and unfamiliar situation may have on coping.

In encountering a new environment, the soldier has to not only cope with the novelties but with the fact that some aspects of the new reality are not at all what they were expected to be. Moreover, if the particular expectations were in fact the reasons for joining the Army (as the Chisholm, et. al. article indicates) or for volunteering for an overseas tour, coping with the reality may be even more traumatic and result in a high level of dissatisfaction and a desire to leave the military.

Borman, et. al. (1975) defined eight dimensions of unit morale and developed a scale for rating a unit's morale on the basis of actual episodes recounted by Army officers and enlisted personnel both in CONUS and overseas (Korea, Germany). These dimensions: community relations; teamwork and cooperation; reactions to adversity; superior-subordinate relations; performance and effort; bearing, appearance and military discipline; pride in unit, Army and country; and use of off duty time--are instrumental in identifying life coping areas in USAREUR. Each of these dimensions pertain to demands and requirements Army personnel and in particular first-term enlistees face throughout their overseas tour. The fact that structures of motivation and job satisfaction, as measures of morale, were found to be identical for Army personnel in Korea and Germany, but less clearly defined by responses from the CONUS personnel, indicates that coping with problems associated with the overseas environment is especially important.

Other aspects of military life with which there is widespread dissatisfaction are also likely to be areas which present coping problems. Holz and Gitter (1974) have studied perceptions of first-term enlistees regarding the quality of Army life. Mean satisfaction rates have been particularly low in regard to disciplinary rules. Not only do such results have

implications for soldiers' morale as the authors indicate, but they also
suggest that disciplinary problems may be associated with unsuccessful coping
which in turn effect service members' attitudes toward their military life
and subsequently their (negative) reenlistment decision.

Given the above indicated problem areas, how do first-term enlistees
cope? Who among them will be able to meet the demands of their assignment
and daily life and who will succumb to the pressures and stress? Our coping
model suggest not only particular personal affective attributes and situa-
tional factors as determinants of successful coping but also, and perhaps
most importantly, the possession of skills which can be effectively applied
in demanding situations. As was already indicated, there is no list of such
skills which are specific to USAREUR. Furthermore, there is no data to show
to what extent first-term enlistees possess such skills. The identification
of both USAREUR life coping skills and the extent to which they are possessed
and utilized by first-term enlistees in USAREUR is one of the major objectives
of the study in the context of which this report has been prepared. In
addition, more information pertaining to personal attributes, environmental
parameters, on and off duty demands and tasks, the organizational and
environmental resources available to first-term enlistees to meet the demands,
as well as the identification of stressful situations specific to USAREUR,
are needed and will be accomplished at a later phase of the present study.

SUMMARY AND CONCLUSION

A theoretical framework has been developed based upon concepts drawn
from psychological, sociological, educational and military perspectives.
The research conducted within these disciplines clearly links the concepts
of adaptation, coping and functional competency. For the purposes of the
Life Coping Skills in USAREUR Project, these concepts have been defined in
the following manner. Adaptation is the process by which an individual
interacts with the environment in order to maintain a congruence, i.e., an
equilibrium, with this environment throughout the individual's life cycle.
Coping is the process by which an individual deals with specific daily life
role demands which emanate from the environment with which the person interacts.
Functional competency refers to the person's possession of the skills and
affective attributes needed to meet the demands imposed by the environment
as well as the ability to select, integrate and apply those skills and
affective attributes in a manner which allows the demand to be met. Thus
adaptation, which encompasses all aspects of the individual-environment
relationship, is the superordinate construct, while coping is the process by
which the individual meets diverse demands through the application of the
skills and attributes which comprise functional competency.

Successful coping occurs when the individual meets the given demand
without disruptive emotional effects. Through successful coping, a person
maintains self-worth, interpersonal relations and a general sense of well-
being. Successful coping is viewed as the main factor in successful
adaptation. Therefore, successful adaptation is contingent upon the extent
to which a person possesses and is able to apply the components of functional
competency required to cope with situation-specific life role demands.

These key concepts have been incorporated in two models which have been
derived specifically for the purpose of the Life Coping Skills in USAREUR
Project. The Model of the Coping Process indicates the major tasks at each
stage of coping with life role demands. It also outlines the potential
results of both effective and ineffective performance of those tasks in
terms of the degree to which the demand is met and stress is reduced.

Using the Model of the Coping Process, the specific conditions under
which breakdowns in the process occur and result in unsuccessful coping have
been identified. At any point in the process--from appraisal of the situa-
tional parameters and personal resources, through the selection and enactment
of a strategy, to the appraisal of the results--conditions may arise which
lead to unsuccessful coping, i.e., the demand is not met and/or a disruptive
level of stress occurs. Inherent in these conditions is the fact that unsuc-
cessful coping is, in large part, the result of an individual's deficiencies
in the knowledge, skills and personal attributes required to perform each
task in the process of meeting the demand. Therefore, the concept of
functional competency has been depicted for the purposes of this project as
a three-dimensional model in which the generic skills (dimension #1) and
the affective attributes (dimension #2) must be possessed, selected,
integrated, and applied in order to meet the situation-specific life role
demand (dimension #3).

Applications of the models within the USAREUR context are suggested.
The operationalization of the models will be completed when more information
regarding USAREUR-specific skills, affective attributes and situational para-
meters has been systematically collected. The data gathered from a review
of studies conducted within civilian and military sectors, however, did

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provide insights into methods which can be used to collect the necessary information. Also suggested were tentative domains of life role demands, generic skills and affective attributes, and general characteristics of situational parameters.

A review of exemplary projects from the competency movement within adult education in the United States resulted in three major contributions: (1) Theories and concepts developed by projects such as the landmark Adult Performance Level Study (1975, 1977) were integrated into the theoretical framework for the Life Coping Skills in USAREUR Project; (2) The techniques which these projects employed to determine important life coping skills were summarized and critiqued in anticipation of selecting, adapting and integrating them into a methodology by which USAREUR-specific life coping skills will be identified; and (3) the lists of competencies and/or skills which have been developed by six exemplary projects from across the nation (New York, Texas, California and Oregon) will be useful in generating domains of life role demands and specific competencies/skills applicable to the USAREUR context. These lists are included in the appendices. Additional information from these studies related to the assessment and instruction of life coping skills will provide guidance in future project tasks.

While systematic efforts have resulted in the identification of the skills/competencies believed to be crucial to success in daily civilian life, no such systematic efforts have been undertaken to identify the specific skills/competencies needed by soldiers to cope successfully with the demands imposed by the military environment and by the environment in which a soldier must live because of the military (e.g., a foreign country or the barracks). The research completed within the military context has focused

on problem areas in which coping is frequently stressful and unsuccessful.
It has suggested factors which contribute to retention, performance and
adaptation. The information from these military studies, particularly
those conducted in USAREUR, will provide a foundation from which specific
skills/competencies can be derived.

As a result of this review of the literature, subsequent tasks will
be accomplished within the theoretical framework derived specifically for
the Life Coping Skills in USAREUR Project and will draw from and build upon
related work which has been completed within civilian and military sectors.

FUTURE DIRECTIONS

The tasks which were outlined in the project's Statement of Work and
Proposal can now be defined more fully, given the insights and directions
provided by the review of the literature. The major tasks to be accomplished
are to (1) delineate USAREUR-specific life coping skills needed by first-
term enlistees; (2) select/develop and validate instruments to measure life
coping skills; (3) assess the extent to which first-term enlistees in Europe
possess these life coping skills; (4) review and critique current programs
within USAREUR which address life coping skills; (5) determine the relation-
ship between coping skills and successful adaptation to USAREUR; and
(6) develop and pilot test a prototype instructional program which addresses
an aspect of life coping skills in USAREUR which has been determined to be
important, lacking among large numbers of first-term enlistees, and not
adequately addressed by existing programs.

Because coping is situation-specific and involves the complex integration
and application of skills and affective attributes, a holistic approach will

be taken to operationalize, in terms specific to USAREUR, the models of the coping process and of functional competency. Systematic procedures will be used to identify the personal adaptive resources needed by first-term enlistees as well as to determine the extent to which these resources are possessed by soldiers. Accordingly, there is a need to identify the generic skills and affective attributes which contribute to functional competency and also to determine the particular environmental/situational parameters from which the service members' life role demands originate.

A need to go beyond the literature in an effort to operationalize the components of the models is apparent. Extant references could only be used to _infer_ what the USAREUR-specific elements are. Information obtained from members of the target population (first-term enlistees) and from individuals who interact with them as they are confronted with various demands (NCOs, officers, and representatives from agencies and organizations within the USAREUR environment) will allow for a more valid and reliable description of the total picture. In order to obtain information from these sources, several procedures will be employed. First, a conference will be held in February, 1981, to which approximately thirty-five people will be invited. Among these will be representatives of health-realted organizations, military units, financial and legal agencies, consumer-related services, educational and training programs, housing and family services, and leisure and recreational organizations. Within a structured format, these representatives will be asked to identify the specific demands faced by first-term enlistees in Europe, the parameters of the situation in which the demands arise, and the skills and affective attributes needed by soldiers to cope effectively with those demands. Information which will be useful in accomplishing other

tasks also will be requested. The representatives are aware of current

problems first-term enlistees experience in coping and can provide their

subjective assessments of the extent to which soldiers are deficient in

life coping skills and the impact the deficiencies have on their adaptation

to USAREUR. The invited participants will also be able to provide information

about existing programs which are designed to assist soldiers in coping with

USAREUR demands. In this matter, they will be asked about the delivery

of these services, their effectiveness and their level of use by first-term

enlistees. In addition to the information obtained from the conference, it

is anticipated that the conference will serve to develop a network of resource

people which will provide support and assistance in future endeavors.

The second data collection technique to be used will be a survey of

the agencies and organizations within USAREUR which were not represented at

the conference. Through the use of interviews and questionnaires, information

about the services rendered, their use and their effectiveness will be solicited.

A sample of first-term enlistees will be the data source for the assess-

ment of the extent to which life coping skills are possessed. In order to

develop the assessment instruments, existing sources of such tests will be

reviewed. Many such instruments are available within the civilian sector

as a result of the competency movement in adult education. It is anticipated

that items from these sources can be selected and/or modified to assess the

USAREUR life coping skills.

The sample of soldiers will also be administered items which have been

developed as indicators of successful adaptation to USAREUR. These indicators

will be derived from the literature and from information obtained from the

resource people within USAREUR. In this way, it will be possible to empirically

test the relationship between life coping skills and successful adaptation to USAREUR.

On the basis of the information obtained from the conference, the survey, and the assessment procedure, one aspect of coping in USAREUR will be selected for instructional treatment. The choice--based on the importance of the topic, the extent to which it is problematic to soldiers, and the effectiveness of current efforts to address it--will be made jointly by representatives from the Human Resources Research Organization (HumRRO), the Army Research Institute (ARI) and the Army Continuing Education Services (ACES). When a topic for the prototype instructional treatment has been determined, decisions must be made as to the best methods, media and delivery system. These choices will be made after analyses of the specific objectives to be taught, the characteristics of the target population and the resources available for the development and implementation of the pilot program have been accomplished. Guidance will be sought from existing civilian projects which have been in operation for several years and which have collected evaluation data. The pilot program will be developed utilizing the principles of performance oriented training, tried out with a sample of first-term enlistees, and formatively evaluated.

The results of this year's project are not expected to impact on the coping skills of large numbers of first-term enlistees. It is anticipated, however, that the theoretical framework and models, the validated list of USAREUR-specific life coping skills and instruments for their assessment, the information about existing programs, and the outcomes of the prototype instructional treatment will provide a foundation for future work which can positively effect to a large extent the ability of individuals to cope with life in USAREUR.

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APPENDIX A

Objectives for Functional Competency
Adult Performance Level Study

APPENDIX A

Objectives for Functional Competency
Adult Performance Level Study

OCCUPATIONAL KNOWLEDGE

GOAL: TO DEVELOP A LEVEL OF OCCUPATIONAL KNOWLEDGE WHICH WILL ENABLE ADULTS
        TO SECURE EMPLOYMENT IN ACCORDANCE WITH THEIR INDIVIDUAL NEEDS AND
        INTERESTS.

1. OBJECTIVE: To build an oral and written vocabulary related to occupational
                knowledge.

2. OBJECTIVE: To identify sources of information (e.g., radio broadcasts,
                newspapers, etc.) which may lead to employment.

3. OBJECTIVE: To define occupational categories in terms of the education
                and job experience required, and to know minimum requirements
                of given occupations.

4. OBJECTIVE: To be aware of vocational testing and counseling methods which
                -help prospective employees recognize job interests and
                qualifications.

5. OBJECTIVE: To understand the differences among commercial employment
                agencies, government employment agencies and private employers.

6. OBJECTIVE: To prepare for job applications and interviews.

7. OBJECTIVE: To know standards of behavior for various types of employment.

8. OBJECTIVE: To know attributes and skills which may lead to promotion.

9. OBJECTIVE: To know the financial and legal aspects of employment.

10. OBJECTIVE: To understand aspects of employment other than financial which
                would affect the individual's satisfaction with a job.

CONSUMER ECONOMICS

GOAL: TO MANAGE A FAMILY ECONOMY AND TO DEMONSTRATE AN AWARENESS OF SOUND
        PURCHASING PRINCIPLES.

1. OBJECTIVE: To build an oral and written consumer economics vocabulary.
                This should be an ongoing process through each objective.

2. OBJECTIVE: To be able to count and convert coins and currency, and to
                convert weights and measures using measurement tables and
                mathematical operations.

3. OBJECTIVE: To understand the concepts of sales tax and income tax.

4. OBJECTIVE: To be aware of the basic principles of money management, including knowing the basics of consumer decision-making.

5. OBJECTIVE: To use catalogs, consumer guides and other reference documents to select goods and services.

6. OBJECTIVE: To be aware of factors that affect costs of goods and services and to determine the most economical places to shop.

7. OBJECTIVE: To be aware of the principles of comparison shopping, and to be aware of the relationship of price to quality among brand names, and between "firsts" and "seconds" and to be able to substitute economy for quality according to individual needs.

8. OBJECTIVE: To know the various methods by which goods are packaged and to know which methods are most cost-effective in terms of quality and storage.

9. OBJECTIVE: To be able to take advantage of sales by knowing where to find them, by planning for their eventuality, and by being able to determine which are of worthwhile value to the individual.

10. OBJECTIVE: To be aware of advertising techniques and to recognize appropriate and inappropriate forms of selling and advertising.

11. OBJECTIVE: To know how to order food and to tip in a restaurant.

12. OBJECTIVE: To be aware of different stores where home furnishings can be purchased and to determine the best buys for essential and luxury items based on individual needs and resources.

13. OBJECTIVE: To determine housing needs and to know how to obtain housing and utilities based on those needs.

14. OBJECTIVE: To know how to buy and maintain a car economically.

15. OBJECTIVE: To know basic procedures for the care and upkeep of personal possessions (home, furniture, car, clothing, etc.) and to be able to use resources relating to such care.

16. OBJECTIVE: To know the various media of exchange and to be familiar with banking services in the community.

17. OBJECTIVE: To develop understanding of credit systems.

18. OBJECTIVE: To collect information concerning the types of insurance available and to be able to select the best insurance for the individual and his family.

19. OBJECTIVE: To know the recourses available to the consumer in the face of misleading and/or fraudulent product/service claims or tactics.

20. OBJECTIVE: To understand the implication of consumption vis-a-vis finite world resources and to recognize that each individual's pattern of consumption influences the general welfare.

HEALTH

GOAL: TO INSURE GOOD MENTAL AND PHYSICAL HEALTH FOR THE INDIVIDUAL AND HIS FAMILY.

1. OBJECTIVE: To develop a working vocabulary related to health, especially as it relates to basic medical and physiological terminology, for accurate reporting of symptoms and following a doctor's directions in applying treatments.

2. OBJECTIVE: To understand how basic safety measures can prevent accidents and injuries and to recognize potential hazards, especially as such hazards relate to home and occupational safety.

3. OBJECTIVE: To know medical and health services in the community.

4. OBJECTIVE: To understand the physical and psychological influences of pregnancy as well as the need for proper prenatal care.

5. OBJECTIVE: To understand the importance of family planning, its physical, psychological, financial and religious implication; and to have knowledge of both effective and ineffective methods of birth control.

6. OBJECTIVE: To understand general child rearing practices and procedures for guarding the health and safety of a child and to apply proper action in accordance with needs and resources.

7. OBJECTIVE: To understand the special health needs and concerns of the adolescent (and his parents) and to become acquainted with some ways to ease the transition from childhood to adulthood.

8. OBJECTIVE: To understand what contributes to good mental health and physical health and to apply this understanding toward preventive care and health maintenance.

9. OBJECTIVE: To understand the interaction of self as a member of small groups (family, work, club, class) and to use this understanding to promote effective interpersonal coping skills.

10. OBJECTIVE: To be able to apply first aid in emergencies and to inform proper authorities of sudden illnesses, various accidents or natural disasters.

11. OBJECTIVE: To plan for health or medical insurance and to be aware of available financial assistance for medical or health problems.

12. OJBECTIVE: To understand what constitutes a proper diet and to plan meals according to individual needs and resources.

13. OBJECTIVE: To understand federal control of various drugs and items for health protection and to understand how public reaction influences this control.

GOVERNMENT AND LAW

GOAL: TO PROMOTE AN UNDERSTANDING OF SOCIETY THROUGH GOVERNMENT AND LAW AND TO BE AWARE OF GOVERNMENTAL FUNCTIONS, AGENCIES AND REGULATIONS WHICH DEFINE INDIVIDUAL RIGHTS AND OBLIGATIONS.

1. OBJECTIVE: To develop a working vocabulary related to government and law in order to understand their functions in society and in the personal life of the individual. This should be an ongoing process as each objective is covered.

2. OBJECTIVE: To develop an understanding of the structure and functioning of the federal government.

3. OBJECTIVE: To investigate the relationship between the individual citizen and the government.

4. OBJECTIVE: To understand the relationship between the individual and the legal system.

5. OBJECTIVE: To obtain a working knowledge of the various legal documents which the individual will need as a member of society.

6. OBJECTIVE: To explore the relationship bewteen government services and the American tax system.

COMMUNITY RESOURCES

GOAL: TO UNDERSTAND THAT COMMUNITY RESOURCES, INCLUDING TRANSPORTATION SYSTEMS ARE UTILIZED BY INDIVIDUALS IN SOCIETY IN ORDER TO OBTAIN A SATISFACTORY MODE OF LIVING.

1. OBJECTIVE: To build an oral and written vocabulary pertaining to community resources and to define community resources in terms of (a) services to community members and (b) services to persons outside the community or non self-supporting members of society (unemployed, criminals, insane, etc.).

2-3. OBJECTIVE: To know the types of community services provided for members of society including the purposes of and how to gain access to these services.

4. OBJECTIVE: To understand how and when to apply for community services, such as Social Security, and Medicare.

5. OBJECTIVE: To know various recreational services available in the community.

6. OBJECTIVE: To be able to utilize information services of the community.

7. OBJECTIVE: To be aware of the people and agencies in the community whose job it is to register and act upon citizen complaints.

SUBSET: TRANSPORTATION

8. OBJECTIVE: To build an oral and written vocabulary of transportation terms, including car insurance terms.

9. OBJECTIVE: To be able to recognize and utilize signs related to transportation needs.

10. OBJECTIVE: To develop a familiarity with transportation schedules, and to calculate fares.

11. OBJECTIVE: To be able to find and utilize information facilities.

12. OBJECTIVE: To learn the use of maps relating to travel needs.

13. OBJECTIVE: To recognize time zone boundaries and understand the concept of daylight savings time.

14. OBJECTIVE: To request information on and make verbal and written travel and overnight accomodations/reservations.

15. OBJECTIVE: To understand the relationship between transportation and public problems.

16. OBJECTIVE: To understand driving regulations, including safety, courtesy, and rules such as having a driver's license, car license plates, etc.

APPENDIX B

Life Skills Generalized Competencies
New York External Diploma Program

Life Skills Generalized Competencies
New York External Diploma Program

A. COMMUNICATION

1.   Read materials from daily life; identify component parts.
2-3.   Listen to taped presentation: identify component parts; identify and describe elements of inflection and bias used to manipulate listener.
4-6.   View: identify and describe effect of visual stimuli; identify non-verbal messages communicated by visual stimuli; identify inferences from captionless materials.
7.   Write an organized paragraph with main idea, supporting details and conclusion.
8.   Write a set of directions with five consecutive steps.
9.   Speak, giving a short talk on a selected topic.

B. COMPUTATION

10-13. Add, subtract, multiply and divide whole numbers.
14-17. Add, subtract, multiply and divide decimals.
18.   Compute percentage.
19.   Compute area.
20-23. Add, subtract, multiply and divide dollars and cents.
24.   Estimate cost in dollars and cents.
25.   Interpret charts and graphs and/or scale drawings: obtain information, draw conclusion.
26.   Make gross estimates in fractions and percentages from graphic representations.

C. SELF-AWARENESS

Decision-Making
27.   Apply decision-making process by solving a problem.
28.   Identify own values and goals.
29.   Identify own roles.
30.   Identify own needs.

Aesthetic Expression
31.   Show awareness of art in everyday living.
32.   React to or create art.
33.   React to a live performance (concert, theatre or musical theatre).
34.   Identify uses of music to manipulate emotions.

Health and Safety
35.   Exercise responsibility for own health and that of family.
36.   Identify negative effects of major health threats.
37.   State preventative techniques, symptoms and causes of major disease.

D. SOCIAL AWARENESS

38-40. Collect, compare and use community resources.
41. Locate geographical names and places on map.
42. Estimate time and distance.
43. State a contribution of two different cultures to American life.
44. Use history (past events) in making decisions and/or plans.
45. Exercise rights and responsibilities of citizenship.
46. Function within a group.
47. State the effects of one group on another group.

E. CONSUMER AWARENESS

48. Apply decision-making process to comparative shopping.
49. Describe sources of consumer information.
50. Distinguish between fact and opinion in everyday consumer practice.
51. Initiate the process for registering a consumer complaint regarding goods and/or services.
52. Compare sources of consumer credit in making a purchase decision.

F. SCIENTIFIC AWARENESS

53. Read scale on standard measuring device.
54. Solve simple equations.
55. Convert measurements.
56. Classify information.
57. Differentiate between observations and conclusions.
58. State the relationship between the individual and the environment.

G. OCCUPATIONAL PREPAREDNESS

59. Identify own vocational interests and aptitudes.
60. Locate and classify information about job choices in local community.
61. Compare various occupations.
62. Identify characteristics of a good worker.
63. Prepare portfolio for job application.
64. Define payroll deduction terms.

APPENDIX C

Major Curriculum Tracks and Representative Units
Adkins' Life Skills Education

APPENDIX C

Major Curriculum Tracks and Representative Units
Adkins' Life Skills Education

Tracks	Representative Units
(1) Managing a Career	Identifying and developing one's interests and abilities, choosing an occupation, locating jobs, conducting interviews.
(2) Developing One's Self and Relating to Others	Caring for health needs, presenting one's self effectively, dealing with conflicts.
(3) Managing Home and Family Responsibilities	Becoming a parent, meeting needs of wives and husbands, budgeting and buying, dealing with the landlord, helping children in school.
(4) Managing Leisure Time	Planning one's time, changing mood and pace through recreation, participative vs. spectator activities.
(5) Exercising Community Rights, Opportunities and Responsibilities	Dealing with representatives of welfare, health and employment organizations, handling discrimination, finding one's way around the city.

APPENDIX D

Common Core Competencies

Performance Requirements for Program Completion
Oregon State Department of Education

Common Core Competencies

Performance Requirements for Program Completion
Oregon State Department of Education

a. READ, WRITE, SPEAK, LISTEN

   1. Read material from daily life comparable in difficulty to a local
       newspaper.
   2. Demonstrate the active listening process.
   3. Interpret information received from daily life visual communications.
   4. Write in a manner that is correct and appropriate in a variety of
       life situations.

b. ANALYZE

   1. Analyze and apply a decision-making process to problems related to
       life experiences.
   2. Select and analyze a conflict situation and apply a decision-making
       process.
   3. Analyze how the consumer's decision to buy may be affected by direct
       and indirect forces (propaganda).

c. COMPUTE

   1. Use whole numbers, fractions, percentages, and decimals to solve life
       mathematical problems.
   2. Apply metric and English measuring skills to life situations.

d. USE BASIC SCIENTIFIC AND TECHNOLOGICAL PROCESSES

   1. Analyze the impact of energy sources on personal life.
   2. Explain principles of selected simple machines.
   3. Interpret the effects of selected technological change on the individual.
   4. Interpret the effects of selected technologies on society in the present
       and future.

e. DEVELOP AND MAINTAIN A HEALTHY MIND AND BODY

   1. Identify personal values and goals.
   2. Identify personal emotional and physical needs.
   3. Analyze and evaluate the status of physical fitness and develop a plan
       for its improvement and/or maintainance.
   4. Explain the importance of physical activity and demonstrate skills.
   5. Describe the relationship between good physical and mental health.
   6. Describe basic safety measures.
   7. Compare the effects of contrasting childrearing practices.
   8. Demonstrate first aid practices.
   9. State relation between nutrition and good health.
  10. Explain the effect of common drugs on the human body.

f. BE AN INFORMED CITIZEN IN THE COMMUNITY, STATE, AND NATION

   1. Identify and describe community services and facilities.
   2. Identify basic legal rights and responsibilities.
   3. Identify basic citizenship rights and responsibilities.
   4. Demonstrate knowledge and understanding of the effect of historical events.
   5. Function within a group.

g. BE AN INFORMED CITIZEN IN INTERACTION WITH THE ENVIRONMENT

   1. Define and interpret man's responsibility in the use, conservation, and preservation of natural resources.
   2. Analyze the effects of population growth upon the environment.
   3. Interpret the impact of the physical environment on feelings and behavior.

h. BE AN INFORMED CITIZEN ON STREETS AND HIGHWAYS

   1. Use travel related maps and schedules.
   2. Identify existing local transportation facilities and services.
   3. Identify responsible conduct on public roads.

i. BE AN INFORMED CONSUMER OF GOODS AND SERVICES

   1. Identify, compare, and contrast services (including consumer credit).
   2. Identify types of insurance for individual and family needs.
   3. Plan a realistic budget based on income and needs.
   4. Define and interpret payroll deductions and terminology.
   5. Demonstrate the process for filing a consumer complaint regarding goods and/or services.

j. FUNCTION WITHIN A CAREER OR CONTINUE EDUCATION LEADING TO A CAREER

   1. Secure and successfully hold full time employment--paid or unpaid.
        -or-
   2. Identify personal interests and skills.
   3. Compare the various careers identified.
   4. Locate and classify information about personal interests in the local community.
   5. Prepare materials for job application and plan for an interview.
   6. Describe the conditions which affect career adjustments and/or changes through a life time.

APPENDIX E

Pool of Functional Competencies
Los Angeles Competency Based
Adult Education Projects

Pool of Functional Competencies
Los Angeles Competency Based
Adult Education Projects

	I*	II**

YOU, THE CITIZEN

		I*	II**
1.	Understand the way in which the California State Government is organized and its responsibilities and duties.	32	120.0
2.	Understand how the individual contributes to the causes of environmental problems and is responsible for solutions to environmental problems.	97	108.5
3.	Understand the ways in which what happens in the United States affects other parts of the world and what happens in other parts of the world affects the United States.	71	121.5
4.	Understand people's basic rights which are included in the United States Constitution, Bill of Rights and other amendments.	4	41.5
5.	Be aware of the current issues facing the citizens of the United States.	58	80.0
6.	Understand the major purposes and characteristics of the American economic system.	67	61.5
7.	Understand the organization, responsibilities and duties of the executive branch of local, state and national governments.	83	117.0
8.	Understand and use positive interpersonal skills in the variety of groups in which you participate.	104	39.0
9.	Understand the purposes, organization, responsibilities and procedures of the judicial system.	37	102.5

*Rank for Adult Competency Based Diploma Program

**Rank for Life Skills for Job Success Project

		I*	II**
10.	Be aware of where to go and who to see for legal services.	53	51.5
11.	Understand the process of legislation and how the individual citizen can affect the process.	62	118.5
12.	Understand the way in which local forms of government are organized, their responsibilities and duties and how they differ from state and national governments.	51	121.5
13.	Understand major historical developments in the United States and California that have affected citizens today.	107	130.0
14.	Understand the rights and responsibilities of the non-citizen.	115	123.5
15.	Understand and appreciate the United States as a multicultural and multiracial society.	81	60.0
16.	Understand the functions and organization of political parties.	95	131.0
17.	Understand the functions and tactics of pressure groups and lobbyists and their influence on events in the United States and the world.	111	114.0
18.	Recognize the importance of support for the law in a democratic society.	35	66.5
19.	Understand and exercise the responsibilities of citizenship.	7	41.5
20.	Understand the relationship between government services provided through social legislation.and the federal, state and local tax systems.	50	104.5
21.	Know sources of information about political issues and critically interpret the information.	80	127.0
22.	Understand the organization of the United States government and its responsibilities and duties.	23.5	116.0

	I*	II**

23. Understand the nature and personal implications of laws/codes affecting vehicle drivers, owners and passengers.   20   34.5

24. Understand and be able to use words and terms related to citizenship.   40   104.5

25. Understand the responsibilities, qualifications and procedures for registering to vote and voting.   1   111.5

YOU, THE CONSUMER

26. Understand and use advertisements in making buying decisions.   114   92.5

27. Know how to buy, license, insure and maintain a car.   41   31.0

28. Understand the services offered by banks, savings and loan associations and credit unions.   14   46.0

29. Know the purposes and methods of budgeting and financial record keeping.   12   30.0

30. Be familiar with catalogue and coupon buying.   126   135.0

31. Understand and use the principles of comparison shopping.   29   97.5

32. Understand the relationship between the quality of the environment and our values, the way we live and the way we use goods and services.   79   69.5

33. Understand the purposes, procedures and consequences of consumer contracts.   11   58.0

34. Know how to use consumer guides to help make buying decisions.   65   100.0

35. Know about local, state and federal agencies and laws that protect the consumer.   36   74.0

36. Understand consumer rights and responsibilities.   43   58.0

		I*	II**
37.	Understand how values, goals and the way we live influence the way we buy and use goods and services.	94	64.5
38.	Understand and be able to use common consumer words.	90	37.0
39.	Understand the value and uses of credit.	15	34.5
40.	Know how to order and pay for meals in a restaurant.	129	125.0
41.	Be aware of the educational services in your community and ways to meet educational expenses.	77	50.0
42.	Know the purpose of food stamps and proper methods of buying and using them.	127	136.0
43.	Understand the purpose and coverage of different kinds of insurance.	45	61.5
44.	Understand and use the information on labels to make buying decisions.	48	78.0
45.	Understand financial plans such as stock investments, mutual funds, and retirement plans.	89	49.0
46.	Know the location, use and advantages/disadvantages of the different kinds of public transportation.	113	32.0
47.	Understand the purposes and methods of saving money.	25	28.0
48.	Understand the relationship between producers and consumers of goods and services and its effects on prices.	86	86.0
49.	Understand sales, income, property and other taxes.	3	58.0
50.	Understand metric and English systems of weights and measures.	44	48.0

		I*	II**
YOU, THE HEALTHY PERSON			
51.	Understand how the human body functions.	70	68.0
52.	Understand good health practices in taking care of children.	31	56.0
53.	Be familiar with the causes, symptoms, prevention and treatment of major chronic diseases.	101	76.5
54.	Be familiar with the causes, symptoms, prevention and treatment of common communicable diseases.	68	80.0
55.	Be able to identify and explain the services provided by community health services.	72	108.5
56.	Understand the causes, effects, prevention and treatment of health problems related to drugs, cigarettes and alcohol.	26	43.5
57.	Be prepared to act effectively in cases of emergency or injury.	8	21.0
58.	Know the importance of regular check-ups.	13	22.5
59.	Plan for medical insurance and be aware of available financial aid for medical or health care.	49	39.0
60.	Recognize medical quackery and frauds, and know how to handle frauds, quacks and malpractice.	73	87.5
61.	Understand basic physiological and psychological terms in order to report symptoms, ask questions and follow a doctor's directions.	88	53.5
62.	Understand the importance of good personal hygiene and know correct body care practices.	19	8.5
63.	Understand the importance of exercise, rest, sleep, and nutrition and practice good physical fitness habits.	59	14.5
64.	Know causes, effects and prevention of various forms of environmental pollution.	61	

		I*	II**
65.	Understand the meaning of mental health and its importance to the total health of a person.	85	29.0
66.	Recognize the danger signals which mean that a person should seek professional psychological help.	93	33.0
67.	Know the proper responses to automobile emergencies and accidents.	30	64.5
68.	Know basic safety measures that help prevent accidents and injuries at home and on the job.	38	16.0
69.	Know the causes, symptoms, preventive measures and treatments of venereal disease.	57	89.5

YOU, THE HOME AND FAMILY MEMBER

		I*	II**
70.	Know where to go and how to buy, mortgage and finance a home.	21	118.5
71.	Know the correct ways to select, purchase and care for clothing.	124	51.5
72.	Be familiar with community resources that can help with family needs or problems.	96	66.5
73.	Be aware of community resources that can meet housing needs or problems.	116	83.5
74.	Understand the importance and know ways of conserving energy in the home.	55	96.0
75.	Be aware of the possible causes, effects and treatment of special family needs such as the aged, physically handicapped, mentally retarded, emotionally disturbed and terminally ill.	91	89.5
76.	Understand the purposes and methods of family planning and its physical, psychological and religious aspects.	39	63.0
77.	Be able to make good decisions when buying furniture and large appliances.	98	106.0
78.	Understand the interlocking roles and responsibilities of the school and home.	34	55.0

		I*	II**
79.	Know the proper use and care of supplies and equipment used for home maintenance and repairs.	56	114.0
80.	Identify family or individual housing needs and find realistic ways to meet them.	78	76.5
81.	Understand human growth and development from infancy through old age.	92	94.5
82.	Understand human reproduction and its physical and psychological effects.	82	100.0
83.	Apply effective interpersonal skills and knowledge in relationships with family members.	23.5	53.5
84.	Manage time, energy and family finances effectively.	27	19.0
85.	Plan meals, buy, store, prepare and serve nutritious food, keeping in mind family needs, tastes and budget.	18	43.5
86.	Understand rental agreements and leases.	47	87.5
87.	Understand the legal, moral, cultural and societal responsibilities of being a parent.	16	39.0
88.	Understand sexual expression, recognize symptoms of sexual problems and know where to go for help.	106	92.5
89.	Understand the emotional, social and financial needs of parents and children in single-parent homes.	109	91.0
90.	Know ways of solving family problems.	76	45.0
91.	Provide accurate information about reproduction and sex at correct stages in a child's life.	75	129.0
92.	Be aware of changing ideas about family relationships and respect people's choices.	103	97.5

		I*	II**

YOU, THE UTILIZER OF LEISURE

		I*	II**
93.	Be familiar with facilities where you can see different kinds of art displayed.	134	138.0
94.	Appreciate the revitalizing benefits of recreation.	120	71.0
95.	Be aware of community groups and organizations which serve recreational, cultural, social and/or self-improvement needs.	121	83.5
96.	Understand ways in which leisure activities affect the quality of the environment and how environmental conditions affect leisure activities.	117	111.5
97.	Possess the skills and interest to enjoy a hobby.	137	82.0
98.	Be familiar with a variety of activities which can be enjoyed by a family or a group in the home.	131	108.5
99.	Know how to make a home more attractive, more comfortable, more convenient.	108	108.5
100.	Be familiar with facilities in your community where you can receive instruction in a craft, skill or academic subject.	46	69.5
101.	Evaluate your own interests, abilities and values that may affect your leisure decisions.	66	47.0
102.	Know how to gather and use information to make leisure decisions.	122	72.0
103.	Understand how leisure activities change as a person's interests, needs, values and abilities change.	118	75.0
104.	Recognize the large amount of leisure time available, now and in the future.	128	80.0
105.	Be acquainted with and use the services regularly offered by your local libraries.	84	85.0
106.	Be acquainted with places of interest in your community.	130	123.5

		I*	II**
107.	Know how to locate, select and appreciate musical and theatrical performances.	133	133.5
108.	Know how to plan a trip, making use of maps, schedules, and travel agencies.	124	100.0
109.	Be familiar with the many types of reading for pleasure.	105	114.0
110.	Know how to make use of your own talents to serve the needs of others.	112	24.0
111.	Be familiar with sources of information for films, radio programs, television shows, records and tapes.	132	128.0
112.	Be familiar with facilities where you can participate in or observe athletic activity.	135	133.5
113.	Be able to participate in at least one individual athletic activity and one team sport.	136	126.0
114.	Be an informed spectator in at least one sport.	139	137.0
115.	Appreciate the value of being able to spend time alone "doing nothing."	125	102.5
116.	Be familiar with a variety of places to visit in your own region, in other parts of the country, and in foreign lands.	138	132.0
117.	Use the common forms of mass media with discrimination.	119	94.5

YOU, THE WORKER

118.	Know how to apply for a job, including how to prepare a resume, write a letter of application and complete application forms.	2	4.0
119.	Understand own attitudes and the attitudes of others toward work.	87	8.5
120.	Possess skills useful in the world of work: numerical, communication, manual, and problem-solving.	5	14.5

		I*	II**
121.	Know how to gather and use information to make career decisions.	17	6.0
122.	Understand career ladders and how one can continually upgrade skills and abilities to obtain more satisfying work.	60	5.0
123.	Know the major duties, required abilities and types of work conditions of different career fields.	54	26.0
124.	Understand and be able to select and use the services of public and private employment agencies.	74	25.0
125.	Understand rules, regulations, procedures and practices related to employee wages, wage deductions, benefits and working conditions.	10	11.5
126.	Understand how changes in society and technology affect employment requirements and availability and be familiar with the resulting trends in employment.	100	22.5
127.	Understand the meaning of equal employment opportunity and the rights and responsibilities of both employers and employees.	63	18.0
128.	Be aware of things which may lead to promotion and those things which may lead to loss of job or demotion.	42	1.5
129.	Possess the interpersonal skills needed to work effectively with supervisors, coworkers and others.	33	1.5
130.	Understand the purposes and procedures of job interviews and demonstrate acceptable interview behavior.	6	3.0
131.	Evaluate own interests, abilities, goals and values that may affect career decisions.	9	10.0
132.	Understand the purposes and practices of labor unions and their effects on society, industry and the individual worker.	110	27.0

		I*	II**
133.	Understand that career development is life-long and is based on a person's educational and occupational choices.	52	13.0
134.	Relate own abilities, interests, goals and values to different career field requirements.	64	11.5
135.	Know and be able to use sources of employment information (radio, TV, newspapers, trade and professional journals, and personal contacts).	28	20.0
136.	Understand the value work has for individuals.	69	17.0
137.	Understand the value of work to society.	99	36.0
138.	Understand and appreciate the contributions and special problems of employed women and know of ways to overcome the problems.	102	73.0
139.	Understand and use commonly used words relating to work.	22	7.0

APPENDIX F

California Adult Competency Survey
Adult Competencies

California Adult Competency Survey
Adult Competencies

I. CULTURAL COMPETENCIES

A. Art Forms

1. recognize major forms of dance (ballet, disco, waltz, etc.).

2. distinguish between various forms of music (e.g., pop, jazz, soul, and classical music).

3. engage in artistic or creative pursuits.

B. Customs, Ceremonies, and Traditions

1. recognize the activities associated with ceremonies (e.g., funerals, graduations, birthday parties, etc.).

2. recognize the meaning of common customs, ceremonies and traditions.

3. temporarily adapt to customs of a different sub-culture without causing conflict or embarrassment.

C. Modes of Communication

1. obtain information about libraries, parks, theaters, religious centers, cultural events, etc., from a variety of sources.

2. recognize the cultural variations in oral communication.

3. read and comprehend a newspaper article.

D. Recreation and Leisure

1. recognize what type of material is available in a library.

2. select types of leisure activities in terms of considerations such as personal interests, needs, and costs.

3. participate in recreational activities.

4. identify the location of facilities and events in the community.

5. find time and space for personal recreation.

E. Religion, Morality, and Values

    1. recognize the situational nature of values such as promptness, self-control, etc.

    2. recognize statements in "bad taste" about ethnicity, religion, morality, etc.

F. Science and Philosophy

    1. distinguish between "scientific" and "unscientific" explanations.

    2. recognize the culturally specific nature of concepts such as time, distance, fairness, utility, etc.

    3. recognize the generally accepted cause/effect, physical and biological laws, and similar basic beliefs.

II. ECONOMIC COMPETENCIES

A. Banking

    1. select appropriate types of banking services.

    2. identify appropriate sources of credit.

    3. describe how to open a checking account.

B. Budget and Record-keeping

    1. select appropriate methods of saving money.

    2. identify items that are commonly included in a personal budget.

C. Consumer Interests

    1. compare rental housing and purchasing a home to determine which is most advantageous.

    2. complete an order form from a catalog.

    3. recognize the common elements of a lease agreement.

    4. locate sources that provide information on consumer and financial matters.

    5. accurately interpret abbreviations in want ads.

    6. compare prices for the same product from two different sources.

7. care for a product according to written instructions on labels or in manuals.

8. accurately interpret a guarantee or warranty.

9. recognize the basic elements of automobile maintenance.

D. Credit

1. select appropriate kinds of credit.

2. complete a credit application accurately.

E. Deceptive Practices

1. recognize misleading advertisements.

2. recognize potentially fraudulent sales or repair transactions.

3. identify how to obtain a refund or replacement for a defective product.

4. recognize which agencies in the community are concerned with consumer complaints.

F. Employment

1. recognize illegal hiring practices.

2. recognize the functions of labor unions.

3. identify the skills, knowledge, and attitudes that are needed for specific occupations.

4. identify the behaviors expected by employers from workers.

5. complete a job application form correctly.

6. compute overtime pay.

7. recognize those occupations that have major legal requirements, such as licensing.

8. locate sources of information useful in finding suitable employment.

G. Insurance

1. recognize the major types of automobile insurance.

2. select appropriate types of insurance coverage.

H. Taxes

    1. complete an income tax form.

    2. use tax tables for sales or income tax computations.

III. HEALTH AND SAFETY COMPETENCIES

A. First Aid

    1. recognize appropriate first aid for common medical emergencies.

    2. recognize situations that call for emergency medical aid.

    3. recognize first aid supplies that should be maintained in the home.

B. Health Hazards

    1. comprehend warning labels on products that should be kept out of the reach of children.

    2. recognize potential health hazards (e.g., substances, environmental conditions, personal habits, etc.).

C. Health Literacy

    1. recognize the meaning of terms commonly found on medical history forms.

    2. distinguish between "normal" and "abnormal" physical development.

    3. comprehend warning labels on household chemicals.

    4. interpret written, oral, or symbolic warnings regarding dangerous environmental situations (e.g., smog alerts, polluted streams, etc.).

    5. comprehend signs commonly found in public places (e.g., "No Smoking", "Do Not Enter").

    6. identify appropriate terms for reporting symptoms, asking questions, and following medical advice.

D. Health Services

    1. identify social agencies that provide health care.

    2. identify appropriate sources of health care for different problems (e.g., poisoning, depression, etc.).

E. Hygiene

   1. recognize when food is no longer safe to eat.

   2. recognize the value of immunization in preventing certain diseases.

F. Nutrition

   1. recognize the proper means of storing food.

   2. recognize foods required in a healthy diet.

   3. recognize reasons for eating nutritionally balanced meals.

G. Safety

   1. recognize common driving hazards and know how to avoid them.

   2. recognize the proper care, maintenance, and storage of household
       supplies and equipment.

   3. recognize what to do in case of fire.

   4. recognize how to make simple home repairs.

   5. recognize safety hazards in the home.

   6. recognize precautions necessary to prevent fires.

   7. recognize unsafe use of tools and equipment.

H. Sexuality

   1. evaluate different methods of birth control.

   2. recognize sources of common sexual problems.

IV. INTERPERSONAL COMPETENCIES

   A. Communications

      1. identify various forms of non-verbal communication (e.g., body
          language, eye contact, facial expression).

      2. communicate, orally or in writing a request for services,
          information, or assistance.

   B. Family Relations

      1. recognize sources of information about available child care services.

      2. identify free or inexpensive activities that can be enjoyed by all
          members of the family.

3. identify the effects of having children upon the parents' life.

4. recognize responsibilities involved in raising children.

5. identify some of the problems that might be found in a home with a single parent.

6. recognize the responsibilities parents have for their children's education.

C. Self-Appraisal

1. identify learning opportunities for self-improvement.

2. seek and maintain interpersonal relationships.

3. recognize changes in one's attitudes and beliefs.

D. Social Behavior

1. identify how to express feelings such as gratitude, praise, regret, or sympathy.

2. identify the advantages of working with others to achieve common objectives.

3. distinguish between socially acceptable and unacceptable forms of expressing affection in public.

4. recognize the stereotyping of people on the basis of sex, age, ethnicity, or religious belief.

E. Stress

1. recognize family problems that require outside assistance.

2. identify sources of help for marriage, family, or other personal problems.

3. recognize when an individual is experiencing serious depression.

4. identify approaches to resolving family conflicts without resorting to outside help.

5. identify causes of emotional stress.

V. SOCIO-POLITICAL COMPETENCIES

A. Citizenship

1. recognize when identification documents are required.

2. recognize when rights are being violated.

3. identify how to obtain information about the procedures for voting.

4. recognize when to report an event to the police or the fire department.

5. distinguish conduct required by law from that required by moral, cultural, or societal imperatives.

B. Public Communication Systems

1. use the postal service and parcel delivery system.

2. recognize how to arrange for telephone service.

3. identify how to acquire information on public issues.

4. use a telephone book effectively.

C. Legal Processes

1. recognize the legal requirements relating to the education of children.

2. identify how to obtain original or duplicate copies of documents, birth certificates, social security cards, passports, green cards, etc.

3. recognize basic legal requirements governing the medical treatment of minor children.

4. identify how to find out what the requirements are for a vehicle operator's license.

5. identify documents that can be used to establish identity.

6. recognize discrimination on the basis of age, sex, or religion.

7. identify appropriate responses when one's rights are violated.

8. recognize the individual's responsibilities related to the judicial system.

9. identify how to obtain legal services.

D. Political Processes

1. identify how citizens can participate in the political process.

2. identify how individual action can help alleviate an environmental problem.

3. recognize how taxes such as local, state, and federal, are used.

4. recognize the function of various governmental positions.

E. Public Resources

1. identify how to use community resources to obtain instruction in a specific skill or technique.

2. complete forms necessary for acquiring a specific license or permit.

3. identify how to obtain information about the benefits, the eligibility requirements, and the application procedure for various services.

4. recognize when an individual is entitled to the services of a public defender.

5. identify available sources of public financial aid.

F. Transportation

1. provide accurate directions to someone seeking a particular destination.

2. select appropriate modes of transportation.

3. accurately locate a route to a destination using a road map.

4. read a bus schedule with comprehension.