Adjustment of Spouses With Caregiving of Mentally Impaired, Physically Impaired, and Nonimpaired Elderly.

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Adjustment of spouses with caregiving of mentally impaired, physically impaired, and non-impaired elderly

Sistler, Audrey Kay, Ph.D.

The Louisiana State University and Agricultural and Mechanical Col., 1988
ADJUSTMENT OF SPOUSES WITH CAREGIVING OF MENTALLY IMPAIRED, PHYSICALLY IMPAIRED, AND NON-IMPAIRED ELDERLY

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy in

The Department of Psychology

by

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ABSTRACT

In this research the relationship between coping, controllability, developmental level, and subjective well-being was examined within the context of caring for an impaired spouse. Seventy-seven older persons in three different categories participated in the study: a) individuals who cared for a mentally impaired spouse, b) individuals who cared for a physically impaired spouse, and c) individuals who lived with a non-impaired spouse.

Results indicated that the non-caregivers had a higher level of well-being than caregivers of the physically impaired and caregivers of the mentally impaired. Caregivers of the mentally impaired individuals sought more social support and engaged in more wishful thinking than did the other two groups, but these coping strategies did not significantly affect their well-being. Wishful thinking was influenced by age: the older the person, the less use of wishful thinking. For the non-caregivers, controllability was inversely related to subjective well-being. When the groups were examined together, subjective well-being was predicted by the context of caregiving, but was not predicted by coping, controllability, and developmental level.
Recently there has been a proliferation of publicity and research about the debilitating effects of Alzheimer's disease (senile dementia of the Alzheimer's type: SDAT), which affects a large proportion of the elderly population. Its infamy is due to its progressively degenerative course that robs its victims of their mental and physical abilities. The disease, affecting approximately 4 million older Americans (Aronson, 1984), causes a build-up of amyloid-rich plaques and neurofibrillary tangles in the brain (Wurtman, 1985). The result is a gradual deterioration of mental abilities and a change in behavior and personality. The most common changes include forgetfulness, confusion, losing things, wandering, repetitive questions, and suspiciousness (Haley, Brown, & Levine, 1985; Chenoweth & Spencer, 1986; Barnes, Raskind, Scott, & Murphy, 1981). Typically, the person remains physically healthy, but is unable to do simple tasks because of memory loss.

As Zarit, Orr, and Zarit (1985) have appropriately stated, the families of the SDAT patient are the hidden victims of the disease. The families must watch their loved ones deteriorate before their eyes and must continually care for them to prevent them from wandering off, turning on the stove and forgetting it, etc. The relationship changes as the person becomes more confused and dependent; mutual
companionship disappears. The constant long-term care inevitably takes its toll on the family.

Clinicians and researchers have been studying the impact of various factors on the well-being of family caregivers. Age, sex, informal and formal social support, duration of the illness, severity of the disability, and family cohesion have all been examined as predictors of burden, strain, well-being, and/or morale (Gilhooly, 1984; Kraus, 1984; Niederehe & Fruge, 1984; Gilleard, 1984; Zarit, Reever & Bach-Peterson, 1980; Cantor, 1983). Results have generally indicated that subjective factors such as the caregiver's perception of burden are more important in predicting the caregiving outcome than are objective factors such as the SDAT patient's level of impairment. Other research has focused on identifying effective treatment strategies for family caregivers such as support groups and individual supportive counseling (Barnes, et al., 1981; Fitting, Rabins, Lucas, & Eastham, 1986).

The problem with most of these empirical studies is that there does not appear to be a unifying theory. Therefore, the first goal of this research is to develop an integrative approach for understanding family caregiving of SDAT patients. In order to do this, four models of adaptation are described that can be applied to caregiver stress. Second, current research is related to the individual components in each of the models, and the
relationship between the components are examined in the context of family caregiving.

**General models of adaptation**

To understand the stress of caregiving one can examine the research on stress and adaptation. Terms such as stress, adaptation, and coping have been defined in various ways. For the purposes of this proposal, stress will be defined according to Lazarus (1981) as "demands from within or without . . . that tax or exceed available resources of the individual." The definition of coping is adopted from Folkman and Lazarus' (1984) work: "the person's cognitive and behavioral efforts to manage the internal and external demands of the person-environment transaction." Finally, adaptation is viewed as a "striving toward acceptable compromise with the environment." (White, 1974) Adaptation represents a broader process of compromise that may or may not involve stress. For example, it is typically measured by instruments that assess a person's overall affect, rather than a response to a specific event. Coping usually refers to strategies specific to stress, such as problem-solving and avoidance of a particular situation. In this proposal, responses to a stressful event will be related to a general measure of adaptation.

Four models of adaptation are useful in conceptualizing the components of caregiver stress: life events, cognitive appraisal, subjective well-being, and developmental level. Each model focuses on different aspects of stress or
adaptation. The life events model emphasizes an external stressful event and an illness outcome. Psychological symptoms as a function of cognitive appraisal and coping, are primary in Folkman and Lazarus's cognitive appraisal model (1984). The subjective well-being model examines the outcome of several life experiences (e.g. daily situations and unusual events), and the developmental model focuses on the differences between individuals in their ability to relate to the environment. This paper discusses the basic hypotheses of each model, present an approach integrating the components from the four models, and relate these components to current family caregiving research.

Life Events. The focus of the life event model is on the external situation that is producing the stress. An event that necessitates change in the individual's life is viewed as a crisis to the extent that time and energy are required to restore homeostasis (Whitbourne, 1985). Stress, viewed as a mediator between the event and adaptation, is measured by the number of events and the degree of readjustment. The original hypothesis was that the greater the number of stressful events, the greater the likelihood of physical and/or mental illness (Rahe, Meyer, Smith, Kjaer, & Holmes, 1964). For example, a person who had experienced four stressful events was considered more likely to become ill than a person who only experienced two events. Later, researchers also considered the degree of readjustment which includes the intensity of the stressor
and the length of time needed to readjust, rather than just the quantity of events (Holmes & Rahe, 1967).

Thus, the life events model has focused on the concrete aspects of an external event as predictors of an illness outcome. Illness or maladjustment occurs when the number of events or the amount of readjustment becomes great.

**Cognitive Appraisal.** In contrast to the life events model which focuses primarily on the external situation and an illness outcome, the cognitive appraisal model emphasizes the person's subjective perception and coping strategies. Folkman and Lazarus (1984) view stress as a transactional relationship between the person and the environment. The relationship is seen as bidirectional and dynamic. Two primary variables mediating this relationship are appraisal and coping. Appraisal is categorized into two types: primary and secondary (Folkman and Lazarus, 1980). Primary appraisal is defined as the person's assessment of the significance of the event. For example, the person evaluates the possible impact of the event on subsequent well-being as being challenging or threatening. Secondary appraisal involves the person's perception of possible resources for coping and the advantages and the disadvantages of coping strategies. The person evaluates different coping options such as changing the situation, accepting it, seeking more information, or holding back from acting impulsively. A person's perception of the
controllability of a situation can be regarded as part of secondary appraisal (Folkman, 1984).

Folkman and Lazarus (1984) have described two major functions of coping: problem-focused and emotion-focused. The problem-focused function serves to change the person-environment relationship, whereas the emotion-focused function regulates the person's emotional reaction to the situation. Based on the two basic functions of coping, Folkman and Lazarus (1985) have identified eight scales of coping strategies in their Ways of Coping questionnaire. Problem-focused scales include confrontive coping and planful problem-solving. Emotion-focused scales include: distancing, self-control, seeking social support, self blame, escape-avoidance, and positive reappraisal. These coping strategies are affected by appraisal. For example, a person who views a stressful experience as a threat rather than a challenge is more likely to use emotion-focused coping rather than problem-focused coping (Folkman & Lazarus, 1980). Also, in secondary appraisal, when the situation must be accepted, emotion-focused coping is more likely to be used.

In their recent research, Folkman, Lazarus, Gruen, and DeLongis (1986) added outcome variables to their model, by considering the effects of appraisal and coping on health and psychological symptoms. Psychological symptomatology, as outcome, was operationalized as the score on the Hopkins Symptoms Checklist. The results of the study indicated that
psychological symptoms could be predicted by appraisal and coping, but health symptoms could not. In summary, the three significant variables in this model are appraisal, coping, and psychological symptoms.

Subjective Well-Being. In contrast to the cognitive appraisal model, the subjective well-being (SWB) model emphasizes the outcome of adaptation, rather than the processes leading to the outcome. The focus has been on adaptation resulting from a continuous evaluation of life experiences rather than as a coping reaction to a discrete stressful event, as in the life events model. Additionally, the SWB model has focused on positive, rather than negative outcomes (Deiner, 1984). SWB includes items measuring general positive affect (i.e. "I'm happy") and negative affect (i.e. "I'm disappointed").

Although both the cognitive appraisal model and the SWB model consider the person's subjective appraisal of a situation, the methodology for each differs. The SWB model was developed through the use of surveys of the general population, whereas the cognitive appraisal research utilized intensive study of smaller samples. The SWB model views subjective perception as outcome, the cognitive appraisal model, as process. The agreement between the two models regarding the importance of subjective perception substantiates the significance of the concept (Whitbourne, 1985).
Two different approaches have been used in the study of SWB. The first, used primarily with persons over 65, has attempted to determine objective predictors (housing, income, health, social supports, etc.) of SWB (Lawton, Kleban, deCarlo, 1984). The second approach, used with the general population, has examined the subjective components that predict SWB (Deiner, 1984). In this second approach, aspiration level, or the person's level of expectations, is seen as a major determinant of SWB. If the discrepancy between an objective situation and the person's expectation is great, the person must reevaluate the situation to achieve well-being. Thus, coping is seen as a passive readjustment of goals and expectations. Extensive research has substantiated the broad applicability of SWB and its predictability from both objective and subjective factors (Deiner, 1984; Bradburn, 1969; Andrews & Withey, 1976; Fordyce, 1983).

Developmental Model. A final model of adaptation considers the person's level of development as a significant factor in predicting both coping and SWB. Labouvie-Vief (1984) has theorized that the mature individual understands the relationship between self and society and is better able to adapt to a changing situation. The mature person is characterized by an ability to accept responsibility for one's own life course and to act with an understanding of how multiple determinants such as self, family, neighbors, church, etc. interact to produce conflict and stress.
Additionally, the mature person is better able to view multiple alternatives for a problem solution and choose the "best fit" for the situation (Arlin, 1984; Sinnott, 1984). Since the mature person may appraise the situation more realistically and utilize the better coping strategies, his level of well-being is hypothesized to be higher than that of the less mature individual. Furthermore, Labouvie-Vief (in press) contends that the mature individual's ability to integrate cognitive and emotional aspects is an adaptive intelligence that assists the person in adjusting to the environment. This adaptive ability can contribute to an ideal state of healthy adult functioning.

In summary, different aspects of adaptation are the focus in each of the four models. The external event and illness outcome are highlighted in the life events model. The cognitive appraisal model emphasizes the subjective components of appraisal and coping, which determine outcomes such as psychological symptoms. The subjective well-being model focuses on the result of ongoing life experiences, both objective and subjective, and the developmental model examines individual differences in ability to perceive and relate to the environment.

An Integrative Approach

Although each of the four models consider important variables, it is essential to broaden the scope of the models and consider the interaction among variables. Bronfenbrenner (1967) argued that to investigate the
progressive accommodation between an individual and the environment, one must analyze the interdependence of systems which include the individual, the immediate environment (family), and the broader environment (social structures, institutions). He suggested that the main effects of this type of study would be interactions between the systems. For example, the influence of the immediate environment such as family tends to influence more formal systems such as schools and churches which, in turn, influence the family. Hultsch and Hickey (1978) also contended that from a dialectical perspective, it is necessary to consider the continuing change between both internal and external factors and their interdependence in order to understand causal relations. Causality is seen as reciprocal rather than unidirectional. Input from both is necessary. The focus of dialectical research is on the adequacy in which the methodology organizes and integrates the variables rather than on the ability to provide a clear illustration of a unilinear cause-effect relationship.

Although other studies have combined some components from the different models, few have synthesized all components in one study. Most of the caregiving research has focused on various characteristics of caregiving such as age, sex, social supports, etc. in a non-systematic way. For example, Kraus (1984) examined age, sex, and social support of caregivers without any explicit theoretical basis. Zarit et al. (1980) studied caregivers' perception
of burden as predicted from the patient's level of impairment and social support, again without a conceptual framework. Therefore, to better dimensionalize the factors and their interactions, the proposed research will integrate components of the four models: life events, controllability, coping, developmental level, and subjective well-being.

Although each component will be examined, certain relationships are of particular interest. Caregiver studies have not examined how coping and controllability are related to SWB in family caregivers. A few studies have considered the variables separately, but did not study their relationships. For instance, George and Gwyther (1986) examined SWB of caregivers in different settings; Coppel, Burton, Becker, and Fiore (1984) studied controllability, but neither considered both controllability and SWB. Additionally, developmental level has not been considered. This proposed research will examine the relationship between each of these variables. The primary focus will be on: (a) the context of caregiving (from the life events model); (b) the caregiver's perception of controllability (as secondary appraisal); and (c) the caregiver's developmental level in these specific caregiving contexts.

In the following section, the components will be defined as they will be operationalized in this study and the supporting research indicating the relationships between variables will be cited. Finally, for each of the
components, related research on caregiving will be described.

**Life events.** One's own illness or the hospitalization of a family member has been identified in the life event research as a stressful event (Brim & Ryff, 1980). This study will consider caregiving of an impaired spouse as a stressful event. Although the life events model usually considers several discrete events, the definition of a life event used in this study will be a single event within a specific context. Specifically, the single event is defined as an upsetting behavior of a care-receiving spouse.

This research will look at the differences between three contexts of caregiving: caring for an SDAT patient, caring for a physically impaired spouse and interacting with a healthy spouse. The importance of studying context differences and their resultant outcomes has been noted (Lohr, Essex, & Klein, 1986; Folkman and Lazarus, 1980; Menaghan, 1983; Pearlin & Schooler, 1978). Different stressors appear to elicit different coping responses. Folkman and Lazarus (1980) found that individuals used more problem-focused coping in job situations and more emotion-focused coping in health situations. Lohr et al. (1986) found that older women used different strategies for health problems than for interpersonal situations.

The difference between caregiving situations has been shown to affect the well-being and coping of the caregiver. For instance, George and Gwyther (1986) found that
caregivers of dementia patients had a lower level of subjective well-being than non-caregivers. Other researchers have noted the differences between the caregiving of a mentally ill person and the caregiving of a physically ill person. According to Horowitz and Klusmann (both cited in Gilleard, 1984), caring for the mentally impaired creates a greater strain than caring for a physically ill person. Poulshock and Deimling (1984), in their path analysis, found that problems associated with mental impairments were predictive of a change in family relationships, in contrast to problems associated with physical impairments, which resulted in a restriction in social activities. Thus, these studies explored the well-being of caregivers of dementia patients and of physically impaired patients.

However, Haley et al. (1985) interviewed only caregivers of dementia patients and asked them to rate the stressfulness of specific behaviors on the Memory and Behavior Problems Checklist and Activities of Daily Living scales. He found that the caregivers perceived a higher level of stress related to mental disabilities than to physical disabilities. Thus, a different context of caregiving may differentially influence the controllability, coping, and SWB of the caregiver. Caregivers of dementia patients, who are more likely to have a lower level of well-being than caregivers of the physically ill, may perceive
the event as uncontrollable and utilize more avoidant coping strategies.

**Controllability.** Secondary appraisal is the evaluation of the options available to the person for coping (Folkman et al., cognitive appraisal model, 1986). As part of secondary appraisal (Folkman, 1984), controllability is a focus of this study. Controllability refers to individuals' beliefs that they can control a situation, in contrast to their beliefs that the situation is controlled by factors outside themselves (see Rotter, 1966).

Each of the four models presented above has examined controllability. Both the life event and the SWB models have viewed controllability as a mediating variable between the event and the outcome (Lefcourt, 1981; Pearlin & Schooler, 1978). In comparable situations, if controllability is high, then SWB will be high. When persons are exposed to an aversive event that they perceive as uncontrollable, they may consider future events also as uncontrollable, and become depressed (Abramson, Seligman, & Teasdale, 1978). The SWB model considers controllability as the ability to control one's emotions/reactions (Whitbourne, 1985). The developmental model views control as a moderating variable between developmental level and coping. For the individual with a high developmental level, a positive relationship is expected between controllability and problem-focused coping (Blanchard-Fields & Irion, 1988).
In Folkman's (1984) article on personal control, appraisal, and coping, she discussed the distinction between general and situational controllability. General controllability refers to persons' overall beliefs of control over their lives. The classic measure of generalized control is Rotter's Locus of Control instrument (Rotter, 1966). Results have been mixed regarding the effect of generalized control on coping. Some studies report that persons who have an internal locus of control are more likely to use problem-focused coping than persons who have an external locus (Anderson, 1977; Parkes, 1984). However, in their study, Folkman, Aldwin, and Lazarus (1981) found that Rotter's scale was not predictive of coping strategies.

Situational control (hereafter referred to as controllability) refers to the person's perception of control over a specific incident. Persons can feel control over the external situation or over their response. Folkman (1984) suggests that persons who desire control, but do not feel they have it, will respond by appraising a situation as threatening and, in turn, use emotion-focused coping.

Few studies have examined controllability in caregiving situations (Pagel, Becker, & Coppel, 1985; Coppel, et al., 1985). However, it would seem to be an influential factor within that context. Caregivers of SDAT patients often state that they feel helpless in their situation. The disease is unrelenting and the patient often cannot
understand and therefore does not respond to measures of control by the caregiver. A caregiver's control of a patient's behavior may be impossible, making control of the caregiver's reaction as the only possibility. In contrast, the context of physical impairment allows a greater degree of controllability, since the caregiver can interact more normally with the spouse and establish an element of control.

Coppel et al. (1985), in a study of spouses of SDAT patients, asked the spouses to identify an upsetting life change event they had experienced due to the SDAT, and an upsetting behavior of the patient. The life event, related to coping perceptions, will be discussed below. The caregiver's perceived lack of control over the upsetting behavior was positively related to depression. In another report of this same study, Pagel et al. (1985), examined the relationship between causal attributions for the disease (i.e., general controllability), loss of control over the upsetting behavior (situational controllability), and depression. They asked the caregivers to rate how much control they had over their spouse's upsetting behavior in terms of influencing it, and how much control they had over their own reaction in public. The investigators found that the caregivers' depression was positively correlated with causal attributions and a loss of control over the behavior and themselves. In an hierarchical regression analyses, the interaction of causal attributions and a perceived loss of
control over spouse's behavior significantly predicted concurrent depression and depression at a follow-up interview, ten months later. The perceived lack of control did not predict concurrent depression, but it did predict depression at follow-up.

Not only can perceived controllability affect a caregiver's depression, but it can influence coping strategies. Coppel et al. (1985) found that the caregiver's perception of poor ability to cope was positively related to depression in the life change situations. In a pilot study for this research, I used the terminology of Coppel et al. (1985) and asked 22 caregivers to identify an upsetting life change they had experienced due to the SDAT, and an upsetting behavior of the patient. The results of this study are tentative because the number of caregivers was small and not all the caregivers completed each measure. Controllability positively correlated with self control coping for the life change, and controllability for the upsetting behavior was negatively correlated with confrontive and escape-avoidance coping. Thus, controllability in SDAT caregivers appears to be negatively correlated with avoidant coping strategies and depression. Controllability in caregivers of physically impaired spouses may have similar effects. This proposed study will help to illuminate possible differences between contexts and to determine whether controllability affects SWB as it affects depression.
Coping. As noted earlier, coping as defined by Folkman et al. cognitive appraisal model (1986), is related to psychological symptoms, with some strategies being more effective in reducing symptoms. The relative efficacy of avoidant and attention coping strategies in reducing pain and anxiety has been examined by Suls and Fletcher (1985) in their meta-analysis. Avoidant strategies were defined as those that focus attention away from the stressor: denial (i.e. "tried to forgot the whole thing"), distraction (i.e. "slept more"), etc. Attention coping referred to strategies that focus attention on the stressor and/or one's psychological reactions to the stressor (i.e. "changed something" or "accepted my feelings"). Attention coping parallels Folkman and Lazarus' (1984) problem-focused coping; avoidant coping is a form of emotion-focused coping. Suls and Fletcher (1985) analyzed 43 studies that measured coping strategies in response to a wide range of stressors: shock, cold pressor, childbirth, surgery, pain. Avoidant strategies were found to be more efficacious than attention over a short term (3 days - 2 weeks interval), but attention was associated with more positive adaptation in long-term stress. Since caregiving is a long term situation, the expectation is that attention strategies will be most predictive of high SWB in the caregiver.

In a related study, planful problem solving (i.e. attention) was negatively correlated with psychological symptoms, but confrontive coping (e.g., "stood my ground and
fought for what I wanted) was positively correlated with symptoms in the Folkman et al. study (1986). Also, Holahan and Moos (1985, 1986) found that persons who were used family support and used less avoidant strategies, suffered less distress and were protected from negative consequences (psychological symptoms and depression).

The results of caregiving coping research appear to indicate that effective coping involves attention to the stressor (behavioral coping or problem-focused) rather than avoidance (passivity, escape-avoidance) of the stressor. In my pilot study, caregiver burden (Zarit et al., 1980) was positively correlated with escape avoidance and distancing, self-blame, and hostility strategies, which are avoidant-type strategies. Similarly, Pratt, Schmall, and Wright (1985) found that burden correlated positively with passivity for both caregivers of community dwelling patients and family members of institutionalized patients. Burden scores correlated negatively with spiritual support and family availability for caregivers of community patients. For caregivers of institutionalized patients, burden was negatively related to confidence in problem solving. Gilhooly (1984), in her study of 16 caregivers, identified coping strategies, similar to those above: behavioral, cognitive, making positive comparison, selective ignoring, re-ordering of life priorities, converting hardship into a virtue. A high morale group used more behavioral coping responses: utilizing services, and mobilizing friends. In
summary, of the studies that have examined the coping strategies of caregiving, some coping strategies appear to be more effective than others. Effective coping strategies of caregiving appear to be problem-focused ones; ineffective ones include avoidant strategies.

Developmental level. Developmental level will be defined in terms of the individual's ability to perceive and understand the world. A mature person is able to recognize multiple factors in a situation and understand self in relation to the environment.

Blanchard-Fields (1986) has contended that the distortive biases of less mature thinking may result in the individual underestimating the role of situational factors in controlling behavior. Immature individuals think in terms of right versus wrong categories, and do not recognize the complexity of issues. Furthermore, their overreliance on preconceptions may bias their answers. This lack of understanding of the relative contribution of their own values and the external characteristics of the situation results in less effective problem solutions. Thus, the mature thinker will recognize the situational and personal factors involved in controllability of the situation which will in turn result in more adaptive problem-solving (Blanchard-Fields, 1986a,b; Labouvie-Vief, 1984; Sinnott, 1984).

This developmental perspective has been empirically demonstrated with coping strategies. Mature individuals are
better able to view multiple solution alternatives to a problem and choose the "best fit" for the situation (Arlin, 1984; Sinnott, 1984). They will then utilize the most effective strategies. Lonky, Kaus, and Roodin (1984) found that social-cognitive maturity as defined by a moral reasoning measure was associated with affirmative coping and that conventional reasoning was associated with abortive coping. Each coping strategy was rated on a scale from strongly affirmative to strongly abortive. For example, appropriate seeking out others was rated as affirmative, whereas, overreliance on others was viewed as abortive. Affirmative coping was found to be positively related to problem-focused coping defined by Folkman and Lazarus (1985). Lazarus and DeLongis (1983) found that less mature escape-avoidance strategies were used more by young people than by older persons, noting that the older persons may have learned the ineffectiveness of those strategies. McCrae (1982) found relatively few age differences except that older adults used less hostile reactions and escapism, again determined to be less mature in status. Given the effectiveness of attention strategies shown in Suls and Fletcher (1985), the mature individual is expected to utilize attention, problem solving strategies more than avoidant coping. Blanchard-Fields (1986b) found that for emotionally salient issues, there was a greater difference in coping between developmental levels. Immature thinkers
could not differentiate self and other and consequently used more avoidant coping (Blanchard-Fields & Irion, 1988).

Furthermore, developmental level was found to differentially mediate controllability and coping strategies (Blanchard-Fields & Irion, 1988). Older persons utilized problem-focused coping in controllable situations and emotion-focused coping in uncontrollable situations, whereas, adolescents did not change their coping strategies based on perceived controllability.

Since mature persons may appraise the situation more realistically and utilize the better coping strategies, their level of well-being is anticipated to be higher than that of less mature individuals. Furthermore, Labouvie-Vief (in press) contends that the individual's integration of cognitive and emotional aspects is an adaptive intelligence that assists the person in adjusting to the environment. This adaptive ability can contribute to an ideal state of healthy adult functioning.

The effect of developmental level in caregiving situations has not been investigated. Therefore, this proposed research will be an initial study to determine the significance of developmental level to caregiving.

Subjective Well-Being. Subjective well-being is a concept that can be applied to the general population, and includes positive affect as well as negative affect. It is not just a measure of the presence or absence of negative factors, as are depression scales. Defined by Bradburn
(1969) as the preponderance of positive affect over negative affect, well-being is a global assessment of all domains of a person's life. As it implies, it is subjective, based on the person's perceptions, rather than on objective information.

Not only do situational variables (i.e. life events) affect SWB, but Folkman and Lazarus (1986) found that appraisal and coping strategies were predictive of SWB. Therefore, SWB appears to be a measure sensitive to the variables in this study.

Many studies of family caregiving have studied burden, rather than SWB, as an outcome measure of stress (Zarit et al, 1980; Zarit, Todd, & Zarit, 1986; Gallagher, Rappaport, Benedict, Lovett, Silven, & Kraemer 1985; Haley et al., 1985; Robinson, 1983). However, burden has not been universally defined. Some have viewed burden as an outcome of the stress, while others see it as part of the stress process. Zarit et al. (1980), one of the first groups to systematically study the impact of SDAT on family caregivers, developed an instrument that measures burden as outcome. Burden was conceptualized as an overall perception consisting of the caregiver's health, finances, psychological well-being, social life, and relationship with a care-receiver. In a longitudinal study, Zarit, Todd, and Zarit (1986) found that later institutionalization of the SDAT patient was better predicted by the caregiver's
perception of burden than by the patient's level of impairment.

Montgomery and Borgatta (1985) also developed a 10-item burden [as outcome] scale, which segments burden into subjective and objective aspects, using the concept of Thompson and Doll (1982). The objective scale includes items concerning time spent for chores, recreation, socializing, and privacy. Subjective burden includes questions about the caregiver's nervousness, stress, and the care receiver's demands and manipulation.

Additionally, burden has been conceptualized as a predictor of family relationships and social activities (Poulshock & Deimling, 1984). In Poulshock and Deimling's path model, the caregiver's burden was seen as a mediator between the patient's level of impairment and the impact variables (outcome) of family relationships and social activities. In contrast to Zarit's concept, burden was measured as the level of upset or perceived difficulty with each specific impairment. For example, caregivers rated the patient's cognition on a scale and then was asked to rate their own level of upset for that item. There were differing levels of burden for different impairments. Thus, a uniform definition of burden does not appear to exist.

Since this study will examine differences across caregiving situations, a global outcome measure is needed. Measures of burden are domain specific for caregivers of dementia and cannot be applied to other situations of
stress. Therefore, burden cannot be used to compare the level of stress between a group of caregivers and a group of non-caregivers.

Other studies of caregivers have used depression as a measure of outcome, rather than burden. As discussed above, the studies of Pagel et. al (1985) and Coppel et. al (1985) examined the relationship of attributions to depression. Fitting et. al. (1986) used depression and burden as two of their outcome measures of caregiving. They found that depression was higher for female caregivers than for males, and that burden increased for younger wives and older husbands with increased impairment of the SDAT patients. However, depression measures focus primarily on negative affect, rather than assessing overall affect, both positive and negative.

SWB is an appropriate measure for this study because it is not domain-specific as is burden and it includes both positive and negative affect. George and Gwyther (1986) noted the problem of domain specific measures in their survey of caregivers and non-caregivers, and utilized global measures of well-being and life satisfaction to assess outcome in different situations. They found that caregivers of dementia patients in the home had a lower level of well-being than caregivers of patients in a nursing home. Non-caregivers had a higher level of well-being than both caregiver groups. Thus, SWB appears to be a useful measure in assessing caregiving.
Implications

Based on previous research, there are still many unanswered questions about the relationships between the components of controllability, coping, developmental level, and SWB within the context of caregiving. Although SWB has been found to differ between non-caregivers and caregivers, (George and Gwyther, 1986) and outcomes differ based on types of impairments (Poulshock and Deimling, 1984), the differences in SWB between non-caregivers, caregivers of SDAT patients, and caregivers of physically impaired spouses has not been clarified.

Additionally, the issue of controllability has only been investigated within the SDAT caregiving context (Coppel et al., 1985; Pagel et al. 1985), and not across caregiving contexts. Controllability may be appropriate in some contexts, but not others. Coping strategies, examined in many studies (Folkman & Lazarus, 1980, 1986; Suls & Fletcher, 1985) to determine their effectiveness in different situations, has been the focus of very few caregiving studies. Problem-focused coping, effective in many situations, may not be effective for caregivers. Finally, the study of developmental level in older caregivers is nonexistent. Although developmental theorists suggest that developmental level will affect coping, controllability, and SWB, there is little empirical evidence. We do not know if the mature individual is more
likely to engage in adaptive coping than the immature person.

When these questions can be answered, we will be better able to assist caregivers in their difficult situation. For instance, if problem-focused coping predicts SWB, caregivers need to be encouraged/taught to use that strategy. Therefore, to better understand the factors that contribute to effective caregiving, this research investigated the components of a life event, controllability, coping, developmental level as predictors of caregiver SWB. Furthermore, the life event, controllability, and developmental level were viewed as predictors of coping. Also, controllability was hypothesized to differentially mediate coping across different developmental levels.

Statement of the Problem

The purpose of this research is to examine the relationship between controllability, coping, developmental level, and SWB within the context of caregiving. In examining these relationships, the appropriateness of an integrative approach to conceptualizing caregiving is explored. The integrative approach combines components from the life events model, the cognitive appraisal and coping model, the developmental model, and the SWB model. This research contributes to a further clarification of these caregiving components by focusing on three specific aspects within the caregiving situation: 1) the influence of a specific caregiving life event on controllability, coping,
28

and SWB. 2) the contribution of the caregiver's developmental level to controllability, coping, and SWB; 3) the relationship of controllability to coping and SWB.

First, the level of SWB appears to vary across different living situations: non-caregiver, family caregiver of an individual at home, family caregiver of an individual in a nursing home, (George & Gwyther, 1986). Also, Haley et al. (1985) found that dealing with mental impairments were more stressful to caregivers than physical impairments. If the outcome varies across different contexts, then the factors that may influence outcome, such as controllability and coping need to be considered across contexts.

Second, developmental level is of interest in this study, given the substantial theoretical work linking it to coping and well-being. Several researchers have maintained that the mature individual will perceive a situation realistically, utilize adaptive coping strategies, and, as a result, have a high level of SWB (Labouvie-Vief 1984; Blanchard-Fields, 1986; Sinnott, 1984). However, little empirical research has been done to support these notions.

Finally, given relatively few studies of controllability in caregiving situations, further study is needed to determine how controllability is related to coping and well-being in these contexts. Controllability has been shown to be positively related to problem-focused coping and SWB in a variety of situations (Pearlin and Schooler, 1978).
Therefore, 27 SDAT caregivers, 17 caregivers of physically impaired patients, and 33 non-caregivers completed measures of controllability, coping, developmental level, and SWB. In summary, the following hypotheses were addressed in this study.

**Life event**

1. The context of the caregiver relationship will influence the SWB of the individual. The caregiver of a dementia patient will have a lower score on SWB than the caregiver of a physically impaired patient, who in turn, will have a lower score than a non-caregiver.

2. The effect of context on controllability and coping will be explored.

**Predictors of Coping**

3. Controllability will affect coping. Controllability will be positively related to problem-focused coping.

4. The developmental level of the individual will be related to coping. The higher the developmental level, the less avoidance coping and the more the problem-focused coping.

5. The developmental level will moderate the relation between controllability and coping. For the individual with a high developmental level, there will be a relationship between controllability and the type of coping strategy. High controllability will be positively to problem-focused coping and low controllability will be positively to emotion-focused coping. However, there will not be a
relationship between controllability and type of coping for the person at a low level of maturity.

Predictors of SWB

6. Coping will affect SWB. Avoidant strategies will be negatively related to SWB. Problem-focused will be positively related to SWB.

7. Controllability will affect SWB. Controllability will be positively related to SWB.

8. The developmental level will be a significant predictor of SWB. The higher the developmental level, the higher the SWB.
METHOD

Subjects

Seventy-seven older persons, ages 54 to 90 (M=69.79, S.D.=7.25), 12 black and 65 white, who were living with their spouse in their own home, participated in this study (see Table 1). They were referred by community organizations such as churches, health care agencies, and councils on aging in Baton Rouge and the surrounding area. Staff persons of these agencies were contacted and given material describing the project and then they asked individuals in the categories of caregivers of SDAT patients, physically impaired and non-caregivers to participate. Participation was totally voluntary. The participants included twenty-seven caregivers (14 males and 13 females) of SDAT patients, seventeen caregivers (4 males and 13 females) of physically impaired patients; and thirty-three non-caregivers (10 males and 23 females). Determination of the sample size was based on a power analysis.

Insert Table 1 about here

Information about the health of the participants and their spouses is included in Table 2. High blood pressure was a common condition across all individuals, as was arthritis. The most prevalent problems of the physically
impaired care-receivers were stroke and heart conditions.

Insert Table 2 about here

Physical impairment was defined as needing assistance in at least two of seven activities of daily living (see below). A medical doctor's diagnosis was used as the definition of SDAT. An analysis of variance indicated no significant differences between the groups on age, education, or caregiver health. However, there was a significant difference on socioeconomic status (SES) \[ F(2,72) = 5.94, \quad p<.004 \], with the non-caregiver group having a higher SES mean score. SES was measured using Warner, Meeker, and Eell's (1983) scale, which contains seven levels based on occupation, from 1 (lawyers, doctors, architects, etc.) to 7 (migrant workers, janitors).

Procedure

Participants were interviewed in their own home or at a senior center. Since the measures were paper/pencil, most participants completed them with minimal assistance from the interviewer. If they preferred for the interviewer to ask the questions verbally, the interviewer completed the protocol. Interviews were conducted by two female Louisiana State University (LSU) psychology graduate students (ages 36 and 24) and two female undergraduates, one from LSU and the other from Southern University, both age 21.
Caregivers were asked to identify three upsetting behaviors of the care-receiver that had occurred in the past week. Non-caregivers identified upsetting behaviors of their spouse that occurred in the past week. They completed the controllability measures on each of the three behaviors, and then selected the most stressful behavior for completing the coping measure. The other measures (SWB, ego level, and health) were not directly related to the upsetting behavior.

The upsetting behaviors were categorized into four areas: problems related to health difficulties, cognitive difficulties, daily hassles, and relationships (see Table 3). The health difficulties included: caring for personal needs, medication difficulties, incontinence, and not following doctor's orders. Cognitive problems included misplacing items, inability to communicate, and asking the same question repeatedly. Daily hassles included frustrations with leaving clothes on the floor, tracking in mud, watching soap operas, and using the telephone too much.

| Insert Table 3 about here |

Relationship problems included: temper, being too critical, not making decisions, and disagreeing over major purchases. A chi-square indicated a significant difference between the groups on content of upsetting behaviors (chi=56.69, p<.001).
Measures of Stress

Controllability. In this study, we were interested in determining the level of situational control the participants perceived they had over two aspects of the stressful situation: control over the spouse's upsetting behavior and control over themselves related to that behavior. Therefore, we asked two questions, "How much control do you feel you had over your spouse's upsetting behavior?" and "In the same situation, how much control do you feel you had over yourself?" The level of control for each question was rated on a 4-point scale from 0 (none) to 3 (a great deal).

Coping. The Ways of Coping Checklist, revised from Folkman and Lazarus (1985) by Vitaliano, Russo, Carr, Maiuro, and Becker (1985), assessed coping strategies. The checklist is a 42-item self-report measure with a 4-point Likert scale response format (0=does not apply and/or not used through 3=used a great deal). Vitaliano et al. (1985) performed a factor analysis based on the responses of 83 outpatients at a mental health center, 62 spouses of SDAT patients, and 425 medical students. Four factors emerged: problem focused, blamed self, wishful thinking, and seeks social support. Vitaliano et al. (1985) decided to separate the "blamed self" factor into two coping strategies: blamed self and avoidance. This division was made because item content differed and the avoidance loadings were lower than the three blamed self items.
Confrontive, distancing, and self-control types of coping from Folkman and Lazarus' scale (1985) did not emerge as factors. Only items with loadings greater than .35 were considered. Internal consistency reliability for the spouses in Vitaliano's study (1985) and in this study is indicated in Table 4. Reliability was considerably higher than those for the original Folkman and Lazarus (1985) scale. Note that the blame and avoidance scales had lower alpha coefficients in this study. Therefore, they were dropped from subsequent analyses.

Vitaliano et al. (1985) found that for the spouses, there was a significant negative relationship between problem focused coping and depression, an indication of construct validity. Wishful thinking was positively related to depression and anxiety. No significant age or gender differences were found.

Global Measures

Subjective Well-Being. Bradburn's scale (1969) has been used extensively with a variety of populations. It consists of ten items, five measuring positive affect (i.e. "feel on top of the world," "pleased about having accomplished something") and five measuring negative affect (i.e. "feel bored," "feel depressed or very unhappy"). A
respondent can receive a score between 0 and 5 for each scale. The Affect Balance Scale is the measure of the difference between the positive and negative scores. For this study, the Affect Balance Score was not utilized because it is a linear function of the other two scales and would contribute to a multicollinearity problem in subsequent analyses.

The Q value reliability of the positive affect items is between .86 and .96, and the negative affect, .90-.97. Gamma values are .83 for the positive affect, .81 for the negative affect and .76 for the balance scale. George and Gwyther (1986) compared the well-being of caregivers to non-caregivers and found that caregivers had lower levels of well-being.

Developmental level. Loevinger's Ego Development Sentence Completion Test (1985) was used to measure developmental level. This test is based on her model of development (Loevinger, 1976) which progresses through seven structural stages. The first stage, Presocial-symbiotic involves an increasing differentiation of the person as an object in an outer world. The second stage, Impulsive, is characterized by world views that are egocentric and concrete. The emphasis is on external control and fear of retaliation, contrasted with dependency and exploitation of the environment. The third stage, Self-protection, describes an individual who focuses on self-interest, as controlling and being controlled. In the fourth stage,
Conformist, the individual is concerned with the "right" or socially-acceptable mode of functioning. Rules are partially externalized, and interpersonal events are based on actions, not feelings. The fifth stage, Conscientious, is characterized by the individual's ability to recognize multiple possibilities in a broader social context, to appreciate individual differences, and to tolerate ambiguity. In the sixth stage, Autonomous, the person has a heightened sense of individuality, a recognition of the complexities of life rather than a focus on moral dichotomies, acknowledgement of and coping with conflict, and generativity. The final stage, Integrated, is characterized by an individual who can achieve a sense of integrated identity by transcending conflict and reconciling polarities.

The Sentence Completion Test includes 36 items covering the areas of interpersonal relations, feelings about self (perceptions of problems, and cognitive style (i.e. "My mother and I..." "When I get mad..." "Rules are..."). It can be completed in 20-30 minutes. Each sentence response is assigned a stage level and then the total protocol is assigned a level using rules based on the cumulative frequency distribution of response levels. The convergent validity of the scale has been evidenced with Kohlberg's levels of development, .80; Perry's levels of intellectual development, .32; levels of empathic understanding, .46; and self-insight, .53 (Loevinger, 1979).
The test can be divided and used as alternate forms. Only page one (18 items) was used, to decrease the length of the time to complete the measures and to allow us to use the second page in future longitudinal research. Loevinger compared the two forms and they are considered equivalent. For women, the median item validity (or the correlation between the item rating and the rating of the protocol) is .495 for page one, .495 for page two, and .50 for the entire test.

In this study, each protocol was scored by two graduate students, using Loevinger's scoring manuals (1970; Redmore, Loevinger, & Tamashiro, 1978). When discrepancies occurred, ratings were compared and a joint decision was made. Interrater reliability for a group of twenty protocols was .97.

Measures of Functional Status

Caregiver Health. A portion of the Self Evaluation of Life Function (Linn and Linn, 1984) inventory was used to rate caregiver health. This scale was developed specifically for older persons and has a test-retest reliability of .93.

From a list of twenty common medications, participants were asked to indicate the ones they currently used. They were also asked to indicate the physical conditions that they currently had. The number of medications and number of conditions were added to obtain a caregiver health score.
This score was used in the analyses to control for variance due to health constraints.

**Activities of Daily Living.** To measure the level of care required by the care-receivers, a modified version of Katz and Akpom (1976) Activities of Daily Living scale was employed. Caregivers rated the amount of assistance their spouse required for each of the following seven areas: mobility, transfers (from bed to chair, etc.), eating, dressing, personal hygiene, bathing, toileting. The rating was on a three-point scale, with a score of one indicating complete independence, and three indicating complete assistance required. Thus, scores on the total measure could range from seven to 21. Scores were used in the analyses as a variable related to SWB. The scale was also used to categorize the caregivers of the physically impaired. For the purposes of this study, participants were classified as caregivers if their spouse required assistance (some or complete) in at least two of the seven areas.

Measurement of Activities of Daily Living has been shown to be a better predictor of institutionalization than diagnoses and number of medications (Wingard, Jones, Kaplan, 1987; Brody, 1987). Also Katz, Branch, Branson, Papsidero, Beck, and Greer (1983) found that dependence on others for ADL assistance is related to near-term mortality.

**Memory and Behavior Problem Checklist.** Zarit and Zarit's Memory and Behavior Problem Checklist (1983) was used to assess the SDAT patient's level of impairment. This
measure is a 31-item inventory that describes various cognitive and behavioral difficulties associated with dementia, such as asking the same question repeatedly, hiding things, getting lost, forgetting what day it is. Caregivers rated the frequency of occurrence of these behaviors in the past week on a scale from zero (not at all) to two (most of the time). The measure has a reliability coefficient alpha of .78.

Although Zarit's (et al. 1980) study did not indicate that degree of impairment had a significant effect on caregiver burden, Kraus (1984) found that severity of the dementia was related to perceived difficulty of care, which in turn was correlated to institutionalization. Therefore, this measure was used to control for any possible effect impairment level had on controllability, coping, and SWB of the SDAT caregivers.
RESULTS

The Effect of Life Event/Context on Controllability, Coping, and Subjective Well-Being

The first set of hypotheses was to determine the effect of context on controllability, coping and SWB. A multivariate analysis of variance (MANOVA) was employed to ascertain significant differences between the three caregiving contexts on the following dependent variables: controllability (self and behavior), coping (seeking social support, wishful thinking, and problem-focused), and SWB (positive and negative). SES was entered as a covariate with context, due to the significant difference between groups. There was no significant overall SES effect.

Insert Table 5 about here

Table 5 indicates the means and standard deviations of each context. Using Wilk's criterion, the contexts were significantly different, \( F(14, 124) = 3.77, p < .0001 \). Further univariate analyses of variance indicated a difference between contexts on positive SWB, \( F(2, 71) = 22.39, p < .0001 \), and on the coping methods of seeking social support, \( F(2, 71) = 10.82, p < .0001 \), and wishful thinking, \( F(2, 71) = 7.01, p < .002 \). Examination of group means via Duncan's post hoc test indicated that the non-caregivers had a significantly higher mean score (\( M = 4.25 \)) on positive SWB than those of the caregivers, both the physically impaired
group (M=2.56) and the SDAT group (M=2.92). The SDAT caregiver group scored higher on the coping strategy of seeking social support (M=9.08) than the other two groups (non-caregiver, M=3.69, physically impaired, M=6.19); and higher on wishful thinking (SDAT caregiver, M=13.69; non-caregiver, M=8.0; caregiver of physically impaired, M=9.88).

To explore the relationship between positive SWB and controllability and between positive SWB and coping within each context, hierarchical multiple regressions were conducted separately for each caregiving context. For the following analyses, SES was entered first into the regressions. (For the SDAT context only, the score on the Memory and Behavior Problem Checklist was entered simultaneously with SES, to remove any variance due to level of mental impairment.) In the first regression, controllability was examined as a predictor of SWB. For the non-caregiver group, \( R^2 \) was .28, \( p<.01 \), and the b weight (-.38, \( p<.01 \)) for controllability of spouse's behavior was significant. Thus, the non-caregiver SWB was negatively related to the perception of control over the spouse's behavior. In contrast, for the caregiving contexts, controllability was not significant in predicting SWB (see Table 6). In the subsequent regression, coping strategies were then computed as predictor variables of SWB for each
group. None of the strategies were significant predictors of SWB for any context.

Interrelationships between Variables

Table 7 indicates that most of the correlations between variables were moderate to low, indicating that they were measuring relatively independent factors. Ego level and education were positively correlated, which corroborates other research (Loevinger, 1970). Therefore, in subsequent analyses, only ego level was used, to avoid the problem of multicollinearity. Moderate correlations existed between the coping strategies and between wishful thinking and behavior controllability. SES was correlated with several variables: ADL, health, SWB, ego level and education.

Developmental Level and Controllability as Predictors of Coping

It was hypothesized that developmental level would be related to coping strategies. A person with a high developmental level would be more likely to use problem-focused coping and less avoidant coping, such as wishful thinking. Another hypothesis was that the more individuals perceived that they could control a situation, the more
likely they would use problem-focused coping. Furthermore, it was proposed that developmental level would moderate the relationship between controllability and coping.

To determine the extent to which coping strategies (problem-focused, wishful thinking, seeking social support) varied as a function of developmental level and controllability, over and above changes due to demographic variables (including context), hierarchical multiple regression analyses were conducted for each strategy. Due to the small size of the sample, the three context groups were combined in the regression analysis and dummy variables were used to code group membership. Preliminary analysis showed that the variables of race and sex had no significant effect on coping, so they were eliminated from the regression analysis. Predictor variables and their order of entry were as follows: (a) demographic variables: context variables, caregiver health, care receiver ADL, SES; (b) caregiver developmental level: age and ego level; (c) caregiver controllability: of self and of spouse's behavior; (d) the interaction of developmental level and controllability. (The interaction term measured the moderator effect of developmental level and controllability on coping.) Then, in order to test for the relative contribution of the variables, the regression was repeated, reversing the order of developmental level and controllability. An incremental F test of the difference in R2 between the variables was computed to determine whether
developmental level and controllability made a significant contribution beyond that of demographics. Table 8 shows the results of each regression analyses.

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Insert Table 8 about here

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**Problem-focused Coping.** Demographics, developmental level, controllability, and their interaction were not significant predictors of problem-focused coping.

**Seeking Social Support.** For seeking social support, $R^2$ was $0.26, p<0.0009$, with the entry of the demographic variables. The variable for the SDAT context was the major source of the contribution, with a significant Beta of $0.48, (p<0.002)$. The change in $R^2$ for the entry of the remaining variables (developmental level, controllability, and their interaction) was not significant.

**Wishful thinking.** Demographics and developmental level were significant predictors of wishful thinking. The source of the contribution from demographic variables was the SDAT group, with a significant Beta of $0.05, p<0.002$. When age and ego level were entered, resulting Betas were $-0.37, p<0.002$ and $-0.17$, n.s., respectively. Thus, the contribution of developmental level was significant above and beyond that of the demographic variables. The change in $R^2$ was not significant for controllability or for the interaction terms.
Developmental Level, Controllability and Coping as Predictors of Subjective Well-Being

To test the hypotheses that there is a relationship between SWB and the variables of developmental level, controllability, and coping, separate hierarchical multiple regressions were performed using positive and negative SWB as the outcome variables. Due to the large number of variables in proportion to the size, a cross validation procedure was conducted. The sample was split (N=27 and N=50) and two regressions were performed on each partial sample to determine the stability of the b weights. The weights retained their relative positions.

Insert Table 9 about here

For the entire sample, the results using negative SWB were nonsignificant. Therefore, only the results for positive SWB will be reported (see Table 9). Demographic variables were entered first, then developmental variables, and finally coping and controllability variables were added simultaneously. The order of the developmental variables and the controllability/coping variables was then reversed. \( R^2 \) for the demographic variables was .45, \( p<.0000 \). Significant Betas for contexts, physically impaired group = -.47, \( p<.0007 \), SDAT group = -.37, \( p<.007 \) indicated that the source of contribution was primarily due to context.
Developmental level and controllability/coping variables did not account for any significant change in $R^2$. 
DISCUSSION

This study sought to integrate components from the life event, cognitive appraisal, subjective well-being (SWB), and developmental level models. Life event was conceptualized as a context of caregiving for a spouse, controllability was viewed as control over an upsetting behavior of the spouse and control over self, coping strategies included problem-focused, wishful thinking, and seeking social support, developmental level was measured by ego level and age, and SWB included positive and negative affect. Context was significant in predicting SWB and coping strategies of wishful thinking and seeking social support. Controllability predicted SWB for non-caregivers and developmental level predicted wishful thinking. When context, controllability, developmental level, and coping were examined together, only context was a significant predictor of SWB.

The results of this study highlight the salience of context in affecting the coping, controllability, and the SWB of older individuals. In predicting SWB, the psychological factors of coping, controllability, and developmental level contributed minimally in comparison to the predictive power of context. Therefore, the integrative approach was useful in showing the primacy of external events (context) over internal (psychological) factors in predicting SWB, but was not helpful in providing a comprehensive framework for understanding caregiving within
contexts. The lack of definitive results may be due to the small sample size, the specific measures or conceptual difficulties. As each individual component is discussed, these problems will be addressed and suggestions for future research will be presented.

The Effect of Life Event/Context on Subjective Well-Being, Coping, and Controllability

The hypothesis that context would affect SWB was supported by the results of this study. The physically impaired group had the lowest mean score on positive SWB, with the SDAT group having the next lowest score, and the non-caregivers having the highest score. This research supports the previous work of George and Gwyther (1986) which indicated that the SWB of non-caregivers was higher than the SWB of caregivers. Deiner (1984) has also reported on the strong effect of various life events on an individual's SWB.

Not only did context affect SWB, but it also influenced the use of specific coping strategies. The SDAT caregiver group sought more social support and engaged in more wishful thinking than did the other groups. The seeking of social support by the SDAT caregivers is related to other research that has indicated the importance of social support in alleviating the perceived burden of caregivers (Zarit, et al., 1980, 1985; Gilhooley, 1984).

Although context influenced SWB and coping strategies, it did not influence the degree of perceived controllability
of the participants. It appears that the perception of little control over a spouse's upsetting behavior may be similar across contexts for older people. Most of the participants had been married for many years, and appeared to have a stable pattern of communication with their spouse. For instance, many of them laughingly commented that they could not control their spouse, but that was fine. They had accepted each other's faults. The SDAT caregivers also seemed to accept their spouses' behavior, viewing the caregiving as a continuation of their spousal commitment.

Since context does affect SWB and coping, its importance cannot be ignored in conceptualizing factors meaningful to caregiving. Researchers must continually be aware of differences across contexts.

**Controllability as a Predictor of Coping and Subjective Well-Being**

*Subjective Well-Being.* Even though the level of controllability was similar across contexts, its effect on SWB did vary across contexts. Although controllability did not significantly influence SWB when the three contexts were combined, it was significant in predicting the SWB of the non-caregivers, with controllability of the spouse's behavior being negatively related to SWB. Apparently, individuals who do not control their spouses have a higher level of SWB. In a related study, Brandtstadter, Krampen, and Heil (1986) found that a person's desire to change their spouse's behavior was negatively related to marital
satisfaction. Thus, in a healthy marriage, spouses tend to accept the other person without trying to change or control them.

However, for caregivers, controllability did not significantly predict SWB. In fact, for the SDAT caregivers, the controllability of spouse's behavior was positively, not negatively, related to SWB. Seemingly, the context of SDAT reverses the direction of influence of controllability on SWB. Although this finding was not significant, the positive relationship was consistent with the results of Coppel et al. (1985), which showed a positive correlation between lack of control and depression for SDAT spouses.

An explanation for the lack of significance of caregiver controllability in this study may relate to the research of Pagel et al. (1985). They found that perceived lack of control did not predict concurrent depression, but it did predict depression in a follow-up interview. Furthermore, the interaction of a perceived lack of control (situational) and a causal attribution (generalized control) was a better predictor of both concurrent and future depression than was the single variable of perceived lack of control. The interaction revealed that the individual who maintained an internal locus of control but could not control the spouse's behavior was more likely to be depressed. Therefore, a follow-up study which also included
a generalized measure of control might reveal a relationship that was not apparent in this study.

An alternative model of controllability other than those initially considered in this study, may be useful in interpreting the differences in the relationship between controllability and SWB across contexts. In their two-process model of control, Rothbaum, Weisz, and Snyder (1982) suggest that an individual can control a situation by changing the environment (primary control) or by changing one's inward emotional response (secondary control). They see individuals' control over their own behavior as primary control and over their own emotion as secondary control. Using this framework, the non-caregivers' acceptance of their spouse's behavior may not indicate a lack of control, but rather a method of controlling oneself. The participants' acceptance of their spouse's behavior in this study could be viewed as a method of secondary control, rather than a response to an uncontrollable situation.

Rothbaum et al. (1982) propose that secondary control might be used more in situations that the person has tried primary control and has determined that it is not satisfactory. The non-caregivers in this study have had many years to determine the lack of effectiveness of primary control in many situations related to their spouses' behavior, and may consequently employ secondary control. However, in the caregiver context, the situation is relatively new, and the caregiver may not recognize the
relative effectiveness of primary and secondary control. The difference in the use of primary control across contexts may be due to a change in the control contingencies with the onset of SDAT. The perception of primary control may be more important for SDAT caregivers, or perhaps secondary control may be used more as the caregiver adjusts to the change.

The issue of controllability raises some interesting questions related to caregiving. Investigation of the primary and secondary concepts as suggested by Rothaman et al. (1982) is needed for future research. In contrast to the focus of Rothbaum et al. (1982) on situational control, the findings of Pagel et al. (1985) suggest that caregiving studies need to examine caregiver generalized locus of control and utilize a longitudinal design. A comparison study examining the relative importance of generalized locus of control versus situational control using primary and secondary control in predicting SWB is needed. Additionally, a longitudinal study of persons before and after the onset of caregiving would indicate changes within individuals due to the context rather than the differences across individuals as reported here. A longitudinal study might also corroborate the results of Pagel et al. (1985).

Coping. Controllability did not significantly predict coping strategies. Difference between contexts may have cancelled out any relationship when the scores were combined across contexts (i.e. the interaction of context and
controllability was not accounted for). For example, seeking social support may be related to controllability for caregivers, but not important for non-caregivers.

The issue of primary and secondary control (Rothbaum et al., 1982) may be an alternative explanation here, also. Although the first controllability question (How much control do you feel you have over your spouse's upsetting behavior?) appeared to measure primary control, the second question which related to control of self, may have measured primary or secondary control. When asked to rate how much they could control themselves, the participants may have considered their behavior (primary) or their emotions (secondary). Thus, the controllability of self measure may have been ambiguous. Additionally, the coping strategies did not differentiate between strategies related to the controllability of the environment and controllability of self. For instance, the problem-focused coping scale included both primary control ("changed something so things would turn out all right") and secondary control ("accepted the next best thing to what I wanted"). Also, when the scales of avoidance and self-blame were deleted due to low reliability, some emotion-focused strategies were eliminated. Consequently, the measures could not adequately reveal a relationship between controllability and coping. Therefore, in future studies of the two-process model of control, a coping measure that separates instrumental and emotion strategies should be utilized.
Developmental Level as a Predictor of Coping and Subjective Well-Being

Coping. The hypothesis that developmental level would be positively related to problem-focused coping and negatively related to avoidant coping was only partially supported. Developmental level was negatively related to the coping strategy of wishful thinking, but it was not positively related to problem-focused coping. These findings support the results of Lazarus and DeLongis (1983) and McCrae (1982) that indicated that older persons used less escapism than young people, but there was little age difference in problem-focused coping. Furthermore, emotion-focused coping was better predicted by developmental level than was problem-focused coping in a study by Blanchard-Fields (1986b). She found that developmental differences were more apparent in emotionally salient contexts. However, Lonky et al. (1984) found that mature individuals used more affirmative coping (similar to problem-focused) than immature persons. Therefore, although the relationship between developmental level and emotion-focused coping is consistent, the relationship between developmental level and problem-focused coping is still tenuous.

Possible factors in these conflicting findings are the instruments used for both coping and developmental level. The coping checklist, developed primarily with young and middle-aged adults, may not adequately measure the strategies and perceptions of older persons. For example,
many participants mentioned the use of humor and prayer in coping with their spouse. Also, the variability of ego level scores was small in this sample. Additional research to both generate additional coping strategies and validate the factors with older persons is needed. Also, more extensive recruitment of participants would help to widen the range of scores. (Other issues related to the measure of ego level will be discussed later.) Therefore, using convergent measures of both developmental level and coping might aid in a better understanding of their relationship.

Subjective Well-Being. Developmental level did not predict SWB. Since developmental level was expected to affect coping, and in turn, affect SWB, the lack of relationship to SWB can be partially attributed to the lack of the relationship between developmental level and coping.

However, conceptual and methodological issues may also have contributed to the lack of relationship between developmental level and SWB. A conceptual issue relates to the framework in which the cognitions of this age group are usually considered. Labouvie-Vief (1984) has proposed that adult cognition be reinterpreted within the context of adaptation, rather than just as a biological process separate from the environment. She contends that the exclusive use of logical and analytical reasoning by a youthful thinker is not adaptive for the mature adult, who must integrate both rational and emotional issues. Perhaps as the older person adjusts to environmental changes with
the aging process, a different type of reasoning may be more adaptive than that used in middle age. Therefore, another framework may be necessary to differentiate the reasoning of the middle-age adult and the older person. Loevinger's scale (1985) primarily differentiates between adolescents and adults, and does not indicate large variability among older adults. Also, ego level, as a global measure, does not measure the process of adaptation, which varies across developmental level, nor does it measure cognitions related to specific events, such as caregiving.

A methodological issue of the sentence completion test (Loevinger, 1985) is its ecological validity for this particular older generation. For instance, when asked to respond to the sentence, "When they talked about sex, I...," the participants often commented that they did not discuss sex in their youth. Consequently, there was little variation in this item. Another sentence may have generated a wider range of responses. Finally, age is not always a good indicator of developmental level (Blanchard-Fields, 1986b; Blanchard-Fields & Irion, in press). Other measures, such as a social-cognitive maturity measure, might better capture the reasoning of the participants.

Given the conceptual limitations, the ecological validity issue, and the restriction of range (mentioned earlier) related to Loevinger's scale, more research is needed to investigate the dimensions that comprise developmental level before eliminating developmental level
as a component for study. Until this research is completed, further caregiving research might focus on other issues, since developmental level as measured here was not related to problem-focused coping, social support coping, and SWB. A final note is that developmental level may not be a predictor of coping or SWB. Perhaps the concept that different levels of cognition affect adaptation is not appropriate. For example, persons who are conforming to their society may not have a lower level of SWB than persons who function more autonomously. Developmental level may not influence adaptation strategies or behavior of individuals.

**Coping as A Predictor of Subjective Well-Being**

None of the coping strategies were significantly related to SWB. A pattern of ineffective and effective coping strategies was not apparent from this study. Even though the SDAT caregiver group sought more social support and engaged in more wishful thinking than the other groups, these strategies still did not affect their SWB. The fact that seeking social support did not affect the caregivers' SWB is somewhat puzzling since several studies have delineated the importance of social supports in alleviating the stress of caregiving (Zarit, Cantor, George, etc). However, in most studies, social support was measured as the frequency of visits from others, whereas in this research, seeking social support was assessed as the multiple coping processes of the caregiver in a particular situation. Thus, this study measured the coping process used in one
situation, rather than a general report or product of social support. The process of seeking social support may be different than the product of social support. Therefore, the caregiver's act of seeking social support (i.e. coping process) was not as predictive of SWB as the response of others to the caregiver (i.e. product). Further research needs to examine the importance of social support in multiple contexts and over time to differentiate between the process and the product.

The ineffectiveness of wishful thinking and problem-focused coping in predicting SWB are contradictory to Vitaliano's work on coping (1985) that showed a positive relationship between wishful thinking and depression and a negative relationship between problem-focused coping and depression in SDAT caregivers. A number of factors may account for these differences: different scales were used for outcome (depression versus SWB); both samples were small and from different parts of the country (states of Washington and Louisiana); and Vitaliano's participants did not specifically complete the coping checklist in reference to an upsetting behavior of the spouse. Instead, they responded in reference to any current serious stressor, 80% of which related to the SDAT. Coping in response to daily hassles, such as an upsetting behavior, may differ from coping with situations related to the disease, such as problems with medical bills or with other family members.
A focus in subsequent research might be on the coping strategy of seeking social support to distinguish between process and product. Longitudinal study will aid in differentiating these concepts. Since many studies have demonstrated the effectiveness of the other coping strategies in a variety of settings, perhaps further study on these strategies is not crucial.

**Subjective Well-Being as Outcome**

Since most of the variables used in this study were not predictive of SWB, it may be that SWB is not the appropriate measure of outcome. Outcome can be measured along several dimensions: subjective-objective; affective-cognitive; and global-specific. First, one could examine subjective and objective factors. An objective behavioral measure might indicate differences not apparent in a subjective measure. Secondly, Stock, Okun, and Benin (1986) have suggested that SWB includes both cognitive and affective components. A life satisfaction scale measuring cognitive aspects could enhance future studies. Finally, a more situational specific measure (i.e. job, marital) might be more sensitive to small differences (Blanchard-Fields & Friedt, in press). For example, Greene, Smith, Gardiner, and Timbury (1982) noted that withdrawal by a care-receiver was related to personal distress of the caregiver, but a care-receiver's disturbance in mood was related to the caregiver's negative attitude. Using such a specific measure limits a comparison
with a non-caregiver group, but some comparisons may be possible.

**Other Factors.** Another factor that might have been expected to influence caregiver SWB was the degree of care required by the care receiver (ADL level). For example, persons who had to feed, dress, and bathe their spouse would be expected to have a lower SWB score than the individuals who did not have to perform these same services. The lack of a significant relationship between SWB and ADL is in accordance with Zarit's work (1980) that also indicated no effect of level of impairment on caregiver burden. Seemingly, once the person requires caregiving, the level of care required has little impact on SWB.

Caregiver health also did not contribute to caregiver SWB. Anecdotally, caregiver health is seen as a major factor in the institutionalization of the care-receiver. Perhaps a more detailed measure of health would provide more information about the relationship between SWB and health.

In summary, the results of this study suggest that context is more important than coping strategies, controllability, and developmental level in predicting the SWB of older persons. A more comprehensive approach to conceptualizing caregiving needs to include other measures of coping and controllability (primary and secondary), a multi-dimensional measure of outcome (i.e. objective, cognitive, and situational specific), and a wider range of participants (age, cohort, and cultural groups). The
dominant emphasis could be on controllability and seeking social support, with developmental level and other coping strategies subordinate. A longitudinal design would be effective in delineating the process and product of coping, and the changes in controllability and outcome with a change in caregiving.

Caveats

These findings must be considered within the limitations of the study. The sample size was small and not randomly selected, so the results may not be generalizable. Recruitment of participants primarily through councils on aging limited the age range and the SES. Caregivers of physically impaired persons were especially difficult to locate. It is not clear whether most physically impaired persons are institutionalized or whether their caregivers do not request community assistance.

Another limitation was the self-report nature of the measures making them susceptible to social desirability problems. For example, the caregivers readily shared their frustrations with the interviewers, but the non-caregivers appeared more hesitant to discuss difficulties that they had experienced with their spouses. Therefore, the non-caregivers may have felt more compelled to present a positive image than the caregivers.

Finally, the conceptual difficulty with the controllability question and the reliability problem with some of the coping scales limited the study. The lack of
clarity on the controllability question related to self may have confounded the primary and secondary control issue. Secondly, the deletion of the avoidance and the self blame scales from the results eliminated many of the coping strategies that related to control of the self.

In conclusion, future research needs to follow two primary directions. First, different measures for the variables in this study may uncover relationships not found here. For instance, a more specific measure of SWB might indicate a relationship with coping and controllability. Controllability could be considered within the framework of primary and secondary control. Secondly, and more importantly, longitudinal research of caregiving is needed to investigate the process more definitively. Montgomery et al. (1985) have urged researchers to study how caregiver burden and care-receiver impairment change with time. As discussed above, Pagel et al. (1985) found changes in predictors of caregiver depression over time. A longitudinal study could delineate between the process and product of coping and reveal changes in primary and secondary controllability as caregiving begins and as it continues.
REFERENCES


Table 1

Means and Standard Deviations for Demographic Data on Spouse Caregivers and Care-receivers

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total Group</th>
<th>Alzheimer's</th>
<th>Physically Impaired</th>
<th>Non-Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N=77)</td>
<td>(n=27)</td>
<td>(n=17)</td>
<td>(n=33)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>69.70 (7.25)</td>
<td>70.78 (8.43)</td>
<td>69.88 (6.30)</td>
<td>68.94 (6.76)</td>
</tr>
<tr>
<td>Education (years)</td>
<td>12.03 (4.09)</td>
<td>12.04 (3.19)</td>
<td>11.35 (4.64)</td>
<td>12.36 (4.51)</td>
</tr>
<tr>
<td>Ego level</td>
<td>4.71 (1.54)</td>
<td>4.85 (0.95)</td>
<td>4.00 (2.09)</td>
<td>4.97 (1.53)</td>
</tr>
<tr>
<td>Health (# of conditions)</td>
<td>1.78 (1.65)</td>
<td>1.74 (1.29)</td>
<td>2.00 (2.37)</td>
<td>1.70 (1.51)</td>
</tr>
<tr>
<td>SES</td>
<td>3.52 (1.71)</td>
<td>3.85 (1.51)</td>
<td>4.38 (1.69)</td>
<td>2.81 (1.54)</td>
</tr>
</tbody>
</table>

Care-receiver Status

| Age                       | 71.01 (6.14)     | 71.81 (7.13)    | 71.76 (5.48)        | 69.97 (5.70)  |
| Education                 | 11.60 (4.66)     | 11.44 (2.53)    | 11.41 (5.98)        | 11.81 (5.36)  |
| Health                    | 1.87 (1.70)      | 2.19 (1.73)     | 2.76 (1.89)         | 1.15 (1.25)   |
| ABL total score           | 10.19 (4.03)     | 12.30 (3.98)    | 12.76 (4.18)        | 7.15 (.44)    |
| MBPC                      | 27.21 (8.61)     |                 |                     |               |

Note: Standard deviations are in parentheses
Table 2

Number of Caregivers and Care-receivers Having Specific Health Conditions

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Alzheimer's (n=27)</th>
<th>Physically Impaired (n=17)</th>
<th>Non-Caregivers (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CG</td>
<td>CR</td>
<td>CG</td>
</tr>
<tr>
<td>1. Heart Condition</td>
<td>6</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>2. Circulation Problems</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3. High Blood Pressure</td>
<td>8</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>4. Anemia</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Diabetes</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6. Emphysema/bronchitis</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Cataracts</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>8. Stomach Ulcers</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. Broken Bones</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10. Gall Bladder Problems</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11. Hernia</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>12. Liver Disease</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13. Kidney Disease</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>14. Urinary Disease</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>15. Parkinson's Disease</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16. Stroke</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>17. Arthritis</td>
<td>10</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Emotional Problems</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>19. Skin Problems</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>20. Cancer</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21. Other</td>
<td>0</td>
<td>27</td>
<td>1</td>
</tr>
</tbody>
</table>

\( ^a \) CG = caregiver  
\( ^b \) CR = care-receiver
Table 3

Content of Upsetting Behavior as a Function of Caregiving Context

<table>
<thead>
<tr>
<th></th>
<th>Relationships</th>
<th>Daily Hassles</th>
<th>Health</th>
<th>Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDAT</td>
<td>18</td>
<td>4</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Physically Impaired</td>
<td>9</td>
<td>7</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Non-Caregivers</td>
<td>33</td>
<td>31</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>
### The Ways of Coping Checklist, Reliabilities, and Examples

<table>
<thead>
<tr>
<th>Coping Scale</th>
<th>Range of Scores</th>
<th>Alpha Coefficient Vitalano (1985)</th>
<th>This Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-focused (n=15)</td>
<td>0-45</td>
<td>.85</td>
<td>.77</td>
</tr>
<tr>
<td>(e.g., just took one step at a time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blamed self (n=3)</td>
<td>0-9</td>
<td>.80</td>
<td>.46</td>
</tr>
<tr>
<td>(e.g., criticized or lectured myself)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wishful thinking (n=8)</td>
<td>0-24</td>
<td>.86</td>
<td>.82</td>
</tr>
<tr>
<td>(e.g., hoped a miracle would happen)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeking social support (n=6)</td>
<td>0-18</td>
<td>.79</td>
<td>.82</td>
</tr>
<tr>
<td>(e.g., talked to someone to find out about the situation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance (n=10)</td>
<td>0-30</td>
<td>.73</td>
<td>.60</td>
</tr>
<tr>
<td>(e.g., went on as if nothing had happened)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Means and Standard Deviations for Coping, Controllability and Subjective Well-Being by Caregiving Group

<table>
<thead>
<tr>
<th></th>
<th>Total (N=77)</th>
<th>Alzheimer's (n=27)</th>
<th>Physically Impaired (n=17)</th>
<th>Non-Caregivers (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coping</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seek</td>
<td>6.0 (4.96)</td>
<td>9.08 (4.21)</td>
<td>6.19 (5.22)</td>
<td>3.69 (4.03)</td>
</tr>
<tr>
<td>Wish</td>
<td>10.40 (6.14)</td>
<td>13.69 (6.03)</td>
<td>9.88 (6.09)</td>
<td>8.00 (5.15)</td>
</tr>
<tr>
<td><strong>Controllability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>.935 (.99)</td>
<td>1.04 (.107)</td>
<td>1.19 (.101)</td>
<td>.75 (.90)</td>
</tr>
<tr>
<td>Self</td>
<td>1.96 (.92)</td>
<td>1.73 (.107)</td>
<td>2.0 (.100)</td>
<td>2.16 (.71)</td>
</tr>
<tr>
<td><strong>Subjective Well-Being</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>3.42 (1.19)</td>
<td>2.92 (.98)</td>
<td>2.56 (1.15)</td>
<td>4.25 (.80)</td>
</tr>
<tr>
<td>Negative</td>
<td>1.37 (4.56)</td>
<td>1.77 (1.60)</td>
<td>1.19 (1.71)</td>
<td>1.09 (1.42)</td>
</tr>
</tbody>
</table>
Table 6

Controllability as a Predictor of Positive Subjective Well-Being by Caregiving Group

<table>
<thead>
<tr>
<th></th>
<th>Alzheimer's</th>
<th>Physically Impaired</th>
<th>Non-Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$</td>
<td>$\Delta R^2$</td>
<td>$p$</td>
</tr>
<tr>
<td>1. SES (MBPC for SDAT)</td>
<td>.12</td>
<td>.12</td>
<td>n.s.</td>
</tr>
<tr>
<td>2. Controllability Behavior Self</td>
<td>.15</td>
<td>.04</td>
<td>n.s.</td>
</tr>
</tbody>
</table>


Table 7
Intercorrelations between Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Problem</td>
<td>.50**</td>
<td>.44**</td>
<td>.09</td>
<td>.12</td>
<td>.18</td>
<td>.14</td>
<td>-.17</td>
<td>.08</td>
<td>.04</td>
<td>-.04</td>
<td>.07</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>2. Seek</td>
<td>.47**</td>
<td>.00</td>
<td>-.06</td>
<td>-.03</td>
<td>-.12</td>
<td>-.04</td>
<td>-.22</td>
<td>-.05</td>
<td>.05</td>
<td>.33**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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*p < .01  **p < .001
Table 3

Demographics, Controllability and Developmental Level as Predictors of Coping

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MODEL 2

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| Y (PI group) | | | | |
| Caregiver health | | | | |
| ADL | | | | |
| SES | | | | |
| Step 2. Developmental Level | | | | |
| Age | .28 | .01 | n.s. | .31 | .12 | .001 |
| Ego level | | | | |
| Step 3. Controllability | | | | |
| Self Behavior | .28 | .00 | n.s. | .36 | .05 | n.s. |
| Step 4. Interaction of controllability and ego level | | | | |
| .29 | .01 | n.s. | .38 | .02 | n.s. |
Table 9
Predictors of Positive Subjective Well-Being

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Measures of Upsetting Behaviors and Controllability

Stressful Situations

Take a few moments and think about three behaviors of your spouse that have been most stressful for you during the last week. By stressful we mean a behavior that was difficult or troubling to you, either because it upset you or because it took considerable effort to deal with it. Please describe the behaviors below.

a.

b.

c.

Think about the situations you described. Circle one number for each of the following questions.

<table>
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<tr>
<td>what</td>
<td>great</td>
</tr>
<tr>
<td>a bit</td>
<td>deal</td>
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</table>

1. How much control do you feel you had over your spouse’s upsetting behavior?

   a.  
   b.  
   c.  

2. In the same situation, how much control did you feel you had over yourself?

   a.  
   b.  
   c.  

Select the most stressful situation and write the letter here:  ___.

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APPENDIX B
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

Appendix B 88-96
Appendix C 92-93
Appendix G 101-102
APPENDIX C
APPENDIX D
Subjective well-Being Scale

YOUR FEELINGS

during the past few weeks did you ever feel... 

1. Pleased about having accomplished something?  
   Yes No

2. Depressed or very unhappy?  
   Yes No

3. Proud because someone complimented you on something you had done?  
   Yes No

4. Particularly excited or interested in something?  
   Yes No

5. Bored?  
   Yes No

6. So restless that you couldn't sit long in a chair?  
   Yes No

7. On top of the world?  
   Yes No

8. That things were going your way?  
   Yes No

9. Very lonely or remote from other people?  
   Yes No

10. Upset because someone criticised you?  
    Yes No
YOUR HEALTH

Now I'd like you to answer some general questions about yourself.

A. Please circle any of the following medications you are currently taking. Place an X by those your spouse takes.

1. Arthritis medication
2. Painkillers
3. Sleeping pills
4. Chest pain pills (nitro)
5. High blood pressure pills
6. Pills for diabetes
7. Heart pills
8. Insulin
9. Stomach medication
10. Tranquilizers
11. Cortisone
12. Antibiotics
13. Thyroid pills
14. Seizure pills
15. Allergy pills
16. Water pills
17. Laxatives
18. Blood thinner pills
19. Pills for breathing
20. Circulation pills
21. Other (List) ___

B. Please circle any of the following conditions your doctor has told you that you currently have at this time. Place an X by those that your spouse has.

1. Heart condition
2. Circulation problems
3. High blood pressure
4. Anemia
5. Diabetes
6. Emphysema/bronchitis
7. Cataracts
8. Stomach ulcers
9. Broken bones
10. Gall bladder problems
11. Hernia
12. Liver disease
13. Kidney disease
14. Urinary disease
15. Parkinson's disease
16. Stroke
17. Arthritis
18. Emotional problems
19. Skin problems
20. Cancer
21. Other (List) ___

___
Activities of Daily Living

Please rate the level of assistance that your spouse needs in each of the areas below, using the levels from one to three.

1 = independent
2 = some assistance required
3 = complete assistance required

Write the appropriate number on the line provided.

--- Mobility (walking)
--- Transfers (moving from chair, bed, vehicle)
--- Eating
--- Dressing
--- Personal hygiene (combing hair, brushing teeth, etc.)
--- Bathing
--- Toileting
APPENDIX G
VITA

Audrey Sistler (nee Butler) was born in Jacksonville, Illinois on June 21, 1951. Upon graduation from Jacksonville High School, she attended the University of Illinois, where she received her Bachelor of Science degree in Psychology, with high honors, in 1973. She received a Masters of Science in Social Work from the University of Wisconsin in Madison in 1975. In May 1986 she received a Masters of Arts in Psychology from Louisiana State University.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Audrey Kay Sistler

Major Field: Psychology

Title of Dissertation: Adjustment of Spouses With Caregiving of Mentally Impaired, Physically Impaired, and Non-impaired Elderly

Approved.

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE

Date of Examination:

July 12, 1988