

# Health patterns in aging women as expanding consciousness

Newman's model of health as expanding consciousness provided the framework for investigation of the phenomenon of powerlessness among aging women. The study sought to identify a pattern of relationships among the impact of chronic illness, frame of temporal reference, death anxiety, hopelessness, and powerlessness. However, subjects manifested high levels of perceived situational control or powerfulness, with restricted range and variance of powerlessness scores. Thus the research questions were not answered. A profile of health patterns among active, aging women did emerge from the findings that is congruent with Newman's model of health as expanding consciousness.

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NEWMAN'S MODEL OF health as expanding consciousness<sup>1</sup> defines patterns of time, space, and movement as correlates of developing consciousness. Newman views health as a synthesis of disease and nondisease that is considered an expression of the total pattern of the individual. She further postulates that the life process is manifested in patterns that evolve negentropically toward increasing complexity. Synthesizing Young's theory of human evolution, Newman depicts expanding consciousness as beginning with potential consciousness (freedom) and moving through processes of binding in time and centering in space toward a turning point where choice occurs in relation to changes in movement. This turning point of choice/movement enables transcendence of the physical self toward decentering in infinite space and unbinding in timelessness toward an evolu-

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tionary ideal of real freedom/absolute consciousness. Thus Newman is suggesting that people come into being from a state of potential consciousness, are bound in time, find identity in space, and through movement learn how things work and make choices that ultimately take them beyond space and time to a state of absolute consciousness. Newman postulates that development of the physical self is necessarily binding in time and space and that movement provides a means of controlling one's environment. She suggests that as physical disability engenders restriction in body movement, losses of freedom become more apparent. As such, the restrictions in movement/space/time force an awareness that extends beyond the physical self. Newman proposes that such awareness occurs when patterns of interaction that worked in the past are no longer effective. Thus in order to survive, the person seeks new and different answers, reflecting a limitation of self that concurrently becomes a process of inner growth, a transformation.<sup>1</sup>

The phenomenon of powerlessness has been defined as an individual's perception that his or her own actions will not affect an outcome.<sup>2</sup> Powerlessness is further defined as the perceived lack of control over a current situation of immediate happening.<sup>2</sup> According to Miller,<sup>2</sup> powerlessness is situationally determined and thus is differentiated from the relatively stable personality trait of locus of control. Congruent with Newman's views regarding health as a synthesis of the polar opposites of disease/nondisease, powerlessness is also conceptualized in terms of a contrasting case of powerfulness. Individual power resources within the person consist of physical strength and reserve, psychologic stamina, positive self-concept, energy,

knowledge, motivation, and hope.<sup>2</sup> Specific variables that theoretically reflect individual power resources include the impact of chronic illness, attitude toward death, frame of temporal reference, and hope.<sup>2-6</sup>

Relationships have been identified between chronic illness and hopelessness,<sup>3</sup> between death anxiety and future orientation,<sup>7-11</sup> between perceived subjective health status and death anxiety,<sup>9</sup> between hopelessness and death anxiety,<sup>12-16</sup> and between chronic illness and temporal orientation.<sup>17</sup> In addition, variables that have been found to be related to helplessness or powerlessness include the impact of chronic illness, hopelessness, and death.<sup>2,13</sup> To date, however, there exists a dearth of research specifying the relationship of these variables to powerlessness. Therefore it was the purpose of this study to examine the contributions of the impact of chronic illness, attitude toward death, temporal orientation, and hope, both singly and jointly, in explaining the experience of powerlessness.

## BACKGROUND

Elderly persons are especially vulnerable to a loss of power because of their changing interaction with their environment. The decrease in physical strength and reserve, diminished social support network, and loss of control over activities of daily living all affect the pattern of the older person's interaction with the environment and may increase feelings of death anxiety and hopelessness, in addition to interfering with how the person feels about the past, present, or future.<sup>2</sup> Through understanding the relationships of death anxiety, temporal orientation, and hopelessness to manifestations of

power, nurses may be in a better position to assist people in the development or utilization of power resources with which to minimize the experience of powerlessness and achieve an improved level of functioning in spite of changes associated with aging and the impact of chronic illness. As Newman suggests, nursing's goal "is not to make people well or prevent their getting sick, but to assist people to utilize the power that is within them as they evolve toward higher levels of consciousness."<sup>1(p67)</sup>

Antonovsky, using a health model rather than an illness model, described people as using generalized resistance resources (GRRs) to cope with tension.<sup>3</sup> GRRs are similar in nature to the power resources described by Miller<sup>2</sup> and to Newman's<sup>1</sup> notions of utilizing power from within. Thus both were used to determine the variables that were examined in this study. Antonovsky discusses the notion of control as a sense of coherence that enables a person to view life as predictable and comprehensible.<sup>3</sup>

Chang,<sup>17</sup> in a study investigating perceived situational control among elderly persons residing in a nursing home, found that perceived control over daily activities contributed strongly to morale among subjects in this group. If subjects felt that they needed assistance with particular activities and they also perceived that assistance was readily available, then the subjects had a sense of control over their environment. Research by Mentzer and Schorr<sup>18</sup> supports Chang's results, suggesting that this notion of control is congruent with Antonovsky's sense of coherence.

Relationships among chronic illness, the elderly, powerlessness, hopelessness, and death anxiety have been well documented. In

addition, attitude toward death has been investigated in relation to an individual's perception of his or her health status and in relation to a person's orientation to time. Schorr reported that individuals who perceived themselves as healthy expressed less anxiety about death.<sup>9</sup> In addition, a positive correlation between future orientation and high death anxiety has been identified.<sup>7-10</sup>

In a study of terminally ill cancer patients, Fitzpatrick<sup>4</sup> reported that subjects tended to live for the present, had a shorter future temporal perspective, and reported more time pressure, even though they felt that they had more free time. Fitzpatrick and Donovan<sup>5</sup> also reported that institutionalized aged persons were more past and present oriented and viewed the present more negatively than did noninstitutionalized aged persons.

The review of the literature indicates that relationships do exist between the elderly and chronic illness, between powerlessness and chronic illness, between chronic illness and hopelessness, between health status and death anxiety, between death anxiety and future temporal orientation, and between chronic illness and temporal orientation. To date no study has been identified that examined the interrelationships among these variables in explaining the variable of powerlessness. Therefore this study addressed the following research questions:

- To what extent is powerlessness explained by perceived impact of chronic illness?
- To what extent is powerlessness explained by attitude toward death?
- To what extent is powerlessness explained by frame of temporal reference?
- To what extent is powerlessness explained by hope/hopelessness?

- To what extent do the combined measures of perceived impact of chronic illness, attitude toward death, frame of temporal reference, and hope/hopelessness explain powerlessness?

## METHODS

### Subjects

Among the population aged 65 years and older, 85% report at least one chronic illness, and approximately 50% of these report activity limitations as a result of the chronic health problem.<sup>19</sup> In addition, women constitute more than 60% of the population older than age 65, with this sex differential increasing as age increases. Older women are also more likely to have greater physical disability than men, particularly impaired joint function and mobility.<sup>20</sup> Older persons also tend to have fewer intact physical, psychologic, social, and environmental resources because of the losses and stresses in-

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herent in the aging process.<sup>21,22</sup> Thus as a group, the elderly are vulnerable to the experience of powerlessness.<sup>23</sup> Accordingly, the sample for this exploratory study consisted of 60 female volunteers, age 65 years or older, from senior citizen centers in a medium-sized city in the western United States. All subjects were able to read and speak English and were capable of giving informed consent.

### Variables and investigative instruments

#### *Impact of chronic illness*

The Sickness Impact Profile (SIP) was used to measure the impact of chronic illness. The SIP is a behaviorally based measure of sickness-related dysfunction designed to provide a measure of health status. It assesses the impact of sickness on the performance of daily activities. The SIP is a self-administered, scaled questionnaire containing 136 items grouped into 12 categories: ambulation, mobility, body care and movement, social interaction, communication, alertness behavior, emotional behavior, sleep and rest, eating, work, home management, and recreation and pastimes. It is designed to reflect a subject's perception of the performance of these activities. The subjects were asked to check those items in each of the 12 categories that they believed described their behavior at a given time. The instrument requires approximately 30 minutes to complete. Scores were computed for each of the 12 SIP categories and for the overall instrument

Test-retest coefficients ( $r = 0.88$ ;  $P < .001$ ) and coefficients of internal consistency ( $r = 0.62$ – $0.90$ ) have documented the SIP's high level of reliability.<sup>24</sup> The SIP has also been validated in subjects of different ages, ranging from 18 to 81 years, with varying degrees of sickness, ranging from members of a group health plan to persons attending outpatient clinics for rheumatoid arthritis, severe hip joint disease, and hyperthyroidism.<sup>24</sup> Criterion validity measures have included the Activities of Daily Living Index and the Harris Analysis of Hip Function.<sup>25,26</sup> The SIP has been found to be a more sensitive predictor of dysfunction than criterion

measures and differentiated among diseases, as well as among different degrees of disease severity.

### *Attitude toward death*

The Death Anxiety Scale (DAS) was used to measure subjects' attitude toward death.<sup>27,28</sup> This instrument consists of 15 items requiring a true or false response. Nine of the items are keyed "true," and six are keyed "false." The instrument is designed to measure thoughts, fears, feelings, and attitudes toward death.

The reliability and construct validity of the DAS have been determined by a variety of procedures and generally found to be high.<sup>27,29-34</sup> Assessment of agreement response set yielded no significant correlations between the DAS and Couch and Keniston's short scale of agreement response tendency, indicating that response set accounts for minimal variance of the DAS.<sup>27</sup> Test-retest reliability yielded a product moment correlation coefficient of 0.83 with an  $\alpha$  value of 0.76. Construct validity has also been established through the comparison of DAS scores to a matched group manifesting high death anxiety. In this instance, the high death anxiety group demonstrated significantly higher scores. The DAS has also been found to correlate highly with Boyer's Fear of Death Scale ( $r = 0.74$ ;  $P < .01$ ).<sup>35</sup>

### *Frame of temporal reference*

The Time Reference Inventory (TRI) was used to measure subjects' frame of temporal reference or temporal orientation.<sup>36</sup> The TRI is a forced-choice, paper-and-pencil test. It contains 10 pleasant (affectively positive)

items, 10 unpleasant (affectively negative) items, and 10 affectively neutral items. The instrument measures past, present, and future orientation. More specifically, the TRI provides separate measures of the subject's past, present, future, and overall orientation. In addition, measures of past, present, and future orientation in relation to each affective component are provided. Subjects were instructed to mark whether the items refer, for them, to the past, present, or future and to give their age at the time to which the item refers.

Test-retest reliability and validity have been found to be generally high.<sup>37</sup> Albers found test-retest reliability to vary with each affective segment over a 3-week period.<sup>38</sup> Albers noted that reliability ranged from 0.694 for neutral statements to 0.715 for positive statements and 0.788 for negative items, with a total test-retest reliability coefficient of 0.788.<sup>38</sup> Split-half reliability was also determined by comparing each half of the items of each affective component with the remaining half. Depending on the affective state, the split-half coefficients ranged from 0.538 to 0.611.

### *Hope*

The Generalized Expectancies Scale (GES) was used to measure hope. This instrument provides an indirect measure of hope by measuring subjects' level of hopelessness.<sup>39</sup> The GES consists of 20 statements about the future that the subject marks as "true" or "false." The scores ranged from 0, representing no hopelessness, to 20, representing maximum hopelessness. Vatz et al reported evidence of the concurrent and construct validity of the GES (unpublished data, 1969). It has demonstrated moderate

correlations with other scales intended to measure future time perspective. In addition, Vatz and colleagues reported that the scores correlated highly with clinical ratings of hopelessness, depression, and changes in depression.

### **Powerlessness**

The Situation Control of Daily Activities Scale (SCDA) was used to measure powerlessness or subjects' perceived control over their daily activities. This instrument consists of a semistructured interview, including 22 items on who determines the time, place, and amount of assistance necessary for each of the activities described. Test-retest reliability has been found to be high ( $r = 0.96$ ), and principal component analysis indicates that the SCDA is comprised of two components: control of physical care and control of socialization.<sup>17</sup> For the purpose of this study, a modified questionnaire version of the SCDA was used. A six-point Likert type scale, as suggested by Chang,<sup>17</sup> ranging from "always determined by myself" to "always determined by somebody else" in a paper-and-pencil format, was used. The modified version of the SCDA was pretested with 15 subjects, with a reliability coefficient of 0.76. Validity of the revised instrument was also assessed using the semistructured interview format as the criterion measure ( $r = 0.56$ ).

### **Procedure**

Following subjects' approval, volunteers who met the preestablished criteria for inclusion in the study were solicited from senior citizens centers. Potential subjects were

approached in group settings at the centers, and the purpose of the study was explained to them. Subjects were informed that no direct benefit to them was expected from their participation in the study and that they might participate voluntarily, refrain from participating, or withdraw from the study at any time without jeopardizing their participation at the center. Subjects were also informed that approximately 1½ hours were required to complete the questionnaires. Anonymity and confidentiality were assured, as names would not be used and data would be analyzed in group form. If they agreed to participate, subjects were asked to sign a consent form. The SIP, the DAS, the TRI, the GES, the modified SCDA, and the Demographic Data Sheet, prearranged in random order, were then distributed to each subject by the data collector. Each subject was allotted the amount of time necessary to complete all of the instruments.

### **Analysis of the data**

Demographic characteristics of the sample are presented in Table 1. Descriptive statistics were computed for each of the variables and are presented in Table 2.

The research questions focused on powerlessness as the dependent variable and on perceived impact of chronic illness, attitude toward death, frame of temporal reference and hope/hopelessness as the independent variables. Initial examination of the data revealed restriction of range among powerlessness scores. The mean score was 107, with a range of 30 to 125. However, 59 of the 60 subjects scored 85 or above. The minimal variance among scores on this variable was reflected in failure to achieve significant

**Table 1.** Demographic characteristics  
(*N* = 60)

| Category                     | Frequency |
|------------------------------|-----------|
| Age: 65 to 93; mean age = 72 | 60        |
| Race                         |           |
| White                        | 59        |
| Black                        | 1         |
| Marital status               |           |
| Married                      | 10        |
| Single                       | 1         |
| Widowed                      | 41        |
| Divorced                     | 7         |
| Other                        | 1         |
| Pets                         |           |
| Yes                          | 24        |
| No                           | 32        |
| No response                  | 4         |
| Annual income (\$)           |           |
| Under 10,000                 | 28        |
| 11,000–20,000                | 14        |
| 21,000–30,000                | 2         |
| 31,000–40,000                | 2         |
| 41,000–50,000                | 1         |
| 51,000–60,000                | 0         |
| Over 60,000                  | 2         |
| No response                  | 11        |
| Chronic illness/disability   |           |
| Yes                          | 38        |
| No                           | 22        |

bivariate correlation coefficients between powerlessness and any of the other variables. As a result, multiple regression analysis to examine the individual contributions of each variable or set of variables toward explaining powerlessness variance was not performed.

Pearson product-moment correlation coefficients were computed between various combinations of the remaining variables. Bivariate correlations of interest are presented in Table 3.

## DISCUSSION

The research questions addressing the interrelationships among death anxiety, hopelessness, impact of chronic illness, and temporal orientation and their single and combined effects on the phenomenon of powerlessness were not answered in this study. Although the five major variables were measured by different instruments, their attributes may have been confounded and consequently yielded results with restricted range and variance. For example, both the DAS and GES measure dimensions of future orientation. Another reason for the lack of variability was the homogeneity of the sample. Subjects were recruited from senior citizen centers, thus reflecting a specific group of aging women who have remained active outside of their homes. Thus the SCDA, although modified, may not have been appropriate for this sample of active, energetic, highly functioning women with numerous power resources and generalized resistance resources.

Furthermore, the methods used in this study may not be congruent with the underlying theoretic framework, which focuses on the synthesis of opposites and moving beyond what is. Rather, the instruments and quantitative methods used focus on opposite or contrasting concepts at a particular point in time, such as powerlessness:powerfulness or hopelessness:hopefulness.

The unexpected findings of this study resulted in the descriptive statistics portraying a distinct pattern, which is here interpreted within Newman's theory of health as expanding consciousness. The phenomenon of powerlessness as described by Miller<sup>2</sup> and the GRRs as described by Antonovsky<sup>3</sup> are also examined in relation to the health pat-

**Table 2.** Descriptive statistics

| Variable                 | Mean   | SD    | Range  | 95% CI      |
|--------------------------|--------|-------|--------|-------------|
| Death anxiety            | 5.95   | 2.94  | 0-12   | 5.19-6.71   |
| Powerlessness            | 106.60 | 17.79 | 0-125  | 102-111     |
| Hopelessness             | 3.40   | 2.81  | 0-13   | 2.68-4.13   |
| Past positive            | 4.78   | 2.33  | 0-10   | 4.13-5.39   |
| Present positive         | 3.10   | 2.50  | 0-10   | 2.45-3.75   |
| Future positive          | 1.10   | 1.70  | 0-8    | 0.66-1.54   |
| Past negative            | 5.88   | 3.82  | 0-10   | 4.90-6.87   |
| Present negative         | 1.37   | 2.53  | 0-10   | 0.71-2.02   |
| Future negative          | 1.25   | 2.29  | 0-10   | 0.66-1.84   |
| Past neutral             | 3.28   | 2.20  | 0-7    | 2.72-3.85   |
| Present neutral          | 2.63   | 2.10  | 0-9    | 2.09-3.18   |
| Future neutral           | 2.27   | 1.94  | 0-7    | 1.77-2.77   |
| Past                     | 13.95  | 5.64  | 0-22   | 12.49-15.41 |
| Present                  | 7.10   | 4.43  | 0-18   | 5.96-8.24   |
| Future                   | 4.62   | 4.09  | 0-15   | 3.56-5.67   |
| Sleep/rest               | 8.42   | 11.93 | 0-51.1 | 5.16-11.32  |
| Emotional behavior       | 3.99   | 8.30  | 0-41.3 | 1.85-6.14   |
| Body care and movement   | 3.43   | 6.54  | 0-41.7 | 1.74-5.12   |
| Home management          | 8.77   | 12.02 | 0-47.2 | 5.66-11.87  |
| Mobility                 | 3.65   | 7.23  | 0-30.5 | 1.79-5.52   |
| Social interaction       | 4.84   | 6.67  | 0-25.9 | 3.11-6.56   |
| Ambulation               | 8.37   | 13.85 | 0-69.0 | 4.79-11.95  |
| Alertness behavior       | 7.36   | 13.42 | 0-55.3 | 3.89-10.83  |
| Communication            | 3.07   | 8.72  | 0-55.4 | 0.82-5.32   |
| Work                     | 4.98   | 14.4  | 0-70.1 | 1.26-8.70   |
| Recreation/pastimes      | 16.66  | 18.21 | 0-66.1 | 11.96-21.36 |
| Eating                   | 2.85   | 4.22  | 0-14.8 | 1.76-3.94   |
| Physical well-being      | 4.45   | 6.40  | 0-27.5 | 2.89-6.20   |
| Psychological well-being | 4.86   | 6.58  | 0-34.3 | 3.16-6.56   |
| Overall                  | 5.53   | 6.14  | 0-27.3 | 3.95-7.12   |

terms of aging women that emerged from this study.

### Health patterns among aging women

As noted in Table 2, this group of 60 women, age 65 to 93 years, scored above the midpoint on the modified SCDA, indicating

that most of the women perceived themselves to be in control of their daily activities. Thus experience of the phenomenon of powerlessness was found to be minimal, with the opposite concept of powerfulness more evident in this sample.

The second major concept, hopelessness, as measured by the GES, was also found to



Table 3. Pearson correlations

| Variable                     | Hopelessness |
|------------------------------|--------------|
| Present negative orientation | 0.38*        |
| Home management              | 0.36*        |
| Mobility                     | 0.43*        |
| Ambulation                   | 0.33†        |
| Physical                     | 0.37†        |

\* $<0.001$ † $<0.01$ 

be low ( $\bar{x} = 3.4$ ; range = 0–20). Thus the sample subjects can be viewed as hopeful rather than depressed regarding their expectations of life. Further indication of positive attitudes are found in a relatively low level of anxiety toward death. Although this group is experiencing the last third of life, their scores were skewed toward the lower third of the Death Anxiety Scale ( $\bar{x} = 6$ ; range = 0–15).

Frame of temporal reference, a complex nonlinear phenomenon, was measured by the TRI, which indicates a person's dominant mode of orientation to either the past, present, or future together with the related dominant affect. The number of time period responses can vary, but the items are worded to reflect equal numbers of positive, negative, and neutral responses. Subjects cannot vary the number of affective responses; they can only vary where the responses are perceived to occur in one's life.

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Fifty-five subjects completed the TRI; the majority of them were oriented to the past ( $n = 43$ ). Of those who were past oriented, the majority ( $n = 28$ ) selected predominantly negative events as having occurred during that time period. Because they have completed at least two thirds of their lives, it may be presumed that a majority of life events have already occurred. The high ratio of negative events in the past suggests that more than half of the subjects perceive the future as more neutral or positive. This latter category also included most of those women who were oriented to the present. Four subjects almost totally ignored the present and focused on the future, which they felt would be negative or neutral.

Perceived impact of chronic illness on one's life style was measured by the Sickness Impact Profile. Although 64% of the sample admitted having a chronic illness, there were no differences found between this subgroup and the remaining subjects in regard to SIP scores or scores on any of the other variables. Overall the SIP scores tended to be low, with minimal variance, indicating relatively high functioning. Those categories that reflect the highest dysfunction as perceived by the subjects in this study will be identified.

Recreation and Pastimes reflects the highest score ( $\bar{x} = 17$ ) and therefore the most change in function. Several explanations might be offered (eg, this particular group may have previously engaged in activities that were strenuous, expensive, or involving a spouse). The reductions in physical agility and socioeconomic status that frequently accompany the aging process, in conjunction with the shorter life span of men, might account for this marked change. Other categories with scores less than Recreation and

Pastimes but still relatively high ( $x = 7-9$ ) included Sleep/Rest, Home Management, Ambulation, and Alertness Behavior. These categories may be related to the time/space/movement relationships reflected in health as expanding consciousness and will be further discussed in relation to Newman's model.

In summary, a sample profile emerges from a group of women, age 65 to 93, who perceive themselves as healthy, in control of their lives, hopeful about the future, and slightly anxious about death. In addition, this group sees themselves as experiencing many negative, positive, and neutral events in the past; experiencing predominantly positive and neutral events presently; and expecting to continue this trend in the future. At this time of their lives, these women do not engage in the recreation and pastimes that they did previously. They do not walk or manage their homes as efficiently as they once did. They may be less alert and their sleep/rest patterns have changed. Overall, however, they perceive that they are functioning satisfactorily.

### **Health patterns as expanding consciousness**

The phenomenon of powerlessness as described by Miller<sup>2</sup> involves a person's inability to cope with chronic illness. Conversely, successful coping involves overcoming powerlessness. Concepts such as coping versus noncoping, overcoming illness versus being overcome, and powerlessness versus powerfulness reflect a dichotomous and fragmented view that is common within a competitive, male-dominated, medical model orientation. A model of this

nature seems applicable to only a few subjects in the present study ( $n = 5$ ); these subjects had outlying scores revealing significant Pearson product-moment correlation coefficients ( $P < .01$  to  $P < .001$ ) between several variables. As reported in Table 3, hopelessness was correlated with several SIP functional categories related to time/space/movement, as well as with present negative orientation, reflecting the outlying scores of this subgroup.

In contrast to Miller's<sup>2</sup> phenomenon of powerlessness with chronic illness, Antonovsky's<sup>3</sup> unitary concepts of general resistance resources and health seem more congruent with Newman's model. Indeed, Antonovsky's notion of control as a giving up of control and his description of a sense of coherence enabling one to view life as comprehensive may be another way of describing a pattern of empowerment that emerges from Newman's model. Both Antonovsky's and Newman's models provide explanatory direction regarding the health patterns of the majority of the women that emerged from this study.

The predominant health pattern described in this study suggests that the majority of subjects synthesized their chronic illness, diminished functional ability, and decreased control over daily activities into a pattern that is consistent with Newman's depiction of restrictions in movement as a turning point, enabling expansion of consciousness beyond the physical self. The process of synthesizing restrictions in physical movement and the completion of at least two thirds of one's lifetime, at the same time expressing hope for the future, may reflect an emerging awareness of health as the pattern of the whole<sup>1</sup> and may be more appropriately investigated using qualitative methods.

Awareness, acceptance, and synthesis of the opposite phenomena of powerlessness: powerfulness into a pattern of empowerment may enable inner growth and transformation, leading through further decentering in space and unbinding in time toward absolute consciousness.<sup>1</sup>

The pattern of expanding consciousness that emerged from aging women in this study

is perhaps best described through the words of Robert Browning and "Rabbi Ben Ezra":

Grow old along with me!  
The best is yet to be,  
The last of life, for which the first was made:  
Our times are in "His" hand  
Who saith "A Whole I planned,  
Youth shows but half; trust God:  
see all nor be afraid!"<sup>39</sup>

## REFERENCES

1. Newman MA. *Health as Expanding Consciousness*. St Louis, Mo: CV Mosby; 1986.
2. Miller J. *Coping With Chronic Illness: Overcoming Powerlessness*. Philadelphia, Pa: FA Davis; 1983.
3. Antonovsky A. *Health, Stress and Coping*. San Francisco, Calif: Jossey Bass; 1980.
4. Fitzpatrick JJ. Patients' perceptions of time: Current research. *Int Nurs Rev*. 1980;27(5):148-153.
5. Fitzpatrick JJ, Donovan M. Temporal experiences and motor behavior among the aging. *Res Nurs Health*. 1978;1(2):60-68.
6. Fitzpatrick JJ, Donovan M, Johnston R. The experience of time during the crisis of cancer. *Cancer Nurs*. 1980;6:191-194.
7. Bascue L, Lawrence R. A study of subjective time and death anxiety in the elderly. *Omega*. 1977; 8(1):81-89.
8. Dickstein L, Blatt S. Death concern, futurity and anticipation. *J Consult Psychol*. 1966;30:11-18.
9. Schorr JA. *Behavior Patterns, Temporal Orientation, and Death Anxiety*. Detroit, Mich: Wayne State University; 1982. Doctoral dissertation.
10. Giroux D. *An Investigation of the Relationships between Death Anxiety and Future Orientation, Future Extension and Time Anxiety in Senior Baccalaureate Nursing Students*. New York, NY: New York University; 1979. Doctoral dissertation.
11. Schorr JA, Schroeder CA. Consciousness as a dissipative structure: An extension of the Newman model. *Nurs Sci Q*. 1989;2(4):183-193.
12. Engel G. A life setting conducive to illness: A giving-up-given-up complex. *Ann Intern Med*. 1968;69:293.
13. Seligman M. Helplessness. In: Seligman M, ed. *On Depression, Development and Death*. San Francisco, Calif: Freeman; 1975.
14. Engel G. Sudden and rapid death during stress: Folklore or folkwisdom. *Ann Intern Med*. 1971;74:771.
15. Lefcourt H. The function of the illusion of control and freedom. *Am Psychol*. 1973;28:419.
16. Richter C. The phenomenon of unexplained sudden death in animals and man. In: Feifel H, ed. *The Meaning of Death*. New York, NY: McGraw-Hill; 1959.
17. Chang B. Perceived situational control of daily activities: A new tool. *Res Nurs Health*. 1978;1(4):181-188.
18. Mentzer CA, Schorr JA. Perceived situational control and perceived duration of time: Expressions of life patterns. *ANS*. 1986;9(1):12-20.
19. Kalish R. *Late Adulthood Perspectives on Human Development*. Monterey, Calif: Brooks/Cole; 1975.
20. National Council on Aging. *Fact Book on Aging*. Washington, D.C.: National Council of Aging; 1978.
21. Eliopoulos C. Chronic care and the elderly: Impact on the client, the family and the nurse. *Top Clin Nurs*. 1981;3(1):71-73.
22. German P. Delivery of care to older people: Issues and outlooks. *Top Clin Nurs*. 1981;3(1):1-13.
23. Miller J, Oertel C. Powerlessness in the elderly: Preventing hopelessness. In: Miller J, ed. *Coping With Chronic Illness: Overcoming Powerlessness*. Philadelphia, Pa: FA Davis; 1983.
24. Gilson B, Bergner M, Babbitt R, Carter W. *The SIP: Final Development and Testing*. Seattle, Wash: University of Washington; 1978.
25. *Interviewing Methods in the Health Interview Survey*. Washington, DC: US Dept of Health, Education, and Welfare. Vital and health statistics, series 2, no 48, 1972.
26. Harris W. Preliminary report of results of Harris total hip replacement. *Clin Orthop*. 1973;95:168.
27. Templar D. The construction and validity of a Death Anxiety Scale. *J Gen Psychol*. 1970;82:165-177.
28. Templar D. Death anxiety: Extraversion, neuroticism

- and cigarette smoking. *Omega*. 1972;3:126-127.
29. Templar D. Death anxiety as related to depression and health of retired persons. *J Gerontol*. 1971;4:521-523.
30. Templar D. The relationship between verbalized and non-verbalized death anxiety. *J Gen Psychol*. 1971;119:211-214.
31. Templar D. Relatively non-technical description of the Death Anxiety Scale. *Arch Foundation Thanatol*. 1971;3:91-93.
32. Templar D, Dotson E. Religious correlates of death anxiety. *Psycholog Reports*. 1971;26(3):895-897.
33. Templar D, Ruff C, Ayers J. Alleviation of high death anxiety with symptomatic treatment of depression. *Psycholog Reports*. 1974;35:74.
34. Templar D, Ruff C. Death Anxiety Scale means, standard deviations and embedding. *Psycholog Reports*. 1971;29:216.
35. Boyar J. *The Construction and Partial Correlation of a Scale for the Measurement of the Fear of Death*. Rochester, NY: University of Rochester; 1974. Doctoral dissertation.
36. Roos P. *Time Reference Inventory*. Arlington, Tex: National Association for Retarded Children; 1964.
37. Foulks J, Webb J. Temporal orientation of diagnostic groups. *J Clin Psychol*. 1970;26:155-159.
38. Albers R. *Anxiety and Time Perspectives*. Austin, Tex: University of Texas; 1965. Doctoral dissertation.
39. Browning R. Rabbi Ben Ezra. In: Loucks J, ed. *Robert Browning's Poetry*. New York, NY: Norton; 1979.