Treating learned helplessness in the elderly dementia patient: Preliminary inquiry

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Abstract

Learned helplessness is the psychological state that results when an individual who is unable to exercise reasonable mastery in one situation incorrectly assumes that he or she is then unable to exercise reasonable control in other situations as well. This may complicate the delivery of health interventions since the individual with learned helplessness may assume that no care provider or treatment intervention can be of assistance. Elderly patients with Alzheimer's disease and other dementias are not immune to this stance of learned helplessness. This paper presents one possible psychosocial rehabilitation approach, the Project SMART (Stress Management and Relaxation Training) program, to the problem of learned helplessness. Based on the skills of adaptive stress-resistant problem solvers, Project SMART can be adapted to the needs of the elderly demented. The clinical and research implications are discussed.

Key words: Alzheimer's disease, dementia sufferers, learned helplessness, long-term care, Project SMART, stress-resistant persons

Introduction

Reasonable mastery, caring attachments to others, and a meaningful purpose in life are the basic components of good physical and mental health and a sense of wellbeing.¹⁻³ Reasonable mastery or personal control is an important factor in attaining these health outcomes at any age.

Reasonable mastery refers to an individual's ability to shape the environment to meet one's needs. Reasonable mastery may facilitate daily living and work skills, enhance interpersonal relationships, and lead to a sense of personal accomplishment and rewards. Self-esteem is

Raymond B. Flannery, Jr., PhD, Massachusetts Department of Mental Health and Harvard Medical School, Cambridge, Massachusetts. maintained or enhanced, and the individual often experiences a sense of contentment.¹⁻³

As normal aging occurs or disease processes in the elderly advance, cognitive skills may weaken and decline over time. Psychosocial rehabilitation and skills programs can be helpful in these cases in mitigating or slowing the course of the decline.⁴⁻⁶ Understandably, not every patient necessarily benefits from a rehabilitation intervention. Although this may be a function of the cognitive inability to process the information necessary for completing a task, cognitive inability may not be the full explanation in each case. There may be other causes, including that of learned helplessness.⁷

Learned helplessness is the psychological state that results when a person who is unable to control one situation incorrectly assumes that he or she is unable to exercise reasonable control in other situations as well. Events that might contribute to making this false assumption could include major life events such as being a victim of violence, psychotic decompensation, societal prejudice, or failure at an important developmental task such as a failed marriage or failed schooling.

The stance of learned helplessness may complicate rehabilitative efforts since the elderly person with learned helplessness will attend the rehabilitation sessions, will continue to believe that no counselor or intervention program can be of assistance, and will not internalize the skills to be mastered. Unless the individual's view of the self as helpless is changed, it is unlikely that the person will fully benefit from the rehabilitative program.

Learned helplessness

As noted earlier, learned helplessness is a cognitive psychological state that results when an individual experiences frequent lack of contingency between the individual's response and the desired outcome. The individual assumes that he or she cannot create the sought-after goals

Table 1. Characteristics of learned helplessness and stress-resistant persons	
Learned helplessness	Stress-resistant persons
No perceived control	Personal control
No task involvement	Commitment
Disrupted daily routines	Basic lifestyle choices
Social isolation	Social involvement

and stops trying to do so. The person has learned to be helpless and may also become depressed as a result of having made this false assumption.

Psychologist Martin Seligman⁷ was originally seeking an animal model to better understand human depression. Between 1965 and 1969, he trained 150 dogs in the following procedure. Some of the animals were placed in a harness from which they could not escape. They were then administered mild electric shocks to their paws. Regardless of any movements that they made, they were unable to escape the shock. They were helpless in this situation. His remaining animals never received this shock procedure.

The animals were then placed in a shuttle-avoidance cage. The cage had two compartments, which were separated by a barrier shoulder high to the animals. Both sides of the cage flooring were wired for mild electric shock. When a signal was presented, the animal had 10 seconds to jump over the barrier to the other side of the cage to avoid mild electric shock to the paws on the side of the cage that they were originally placed in. If the animal jumped successfully, the process was repeated from the other side of the cage into which the animal had just jumped. Animals that Seligman had not subjected to being shocked in the harness outside the cage learned to jump to safety very quickly and correctly. However, of the animals that had been subjected to helplessness in the harness, none learned to jump to safety.

These latter animals withdrew to a corner of the cage, did not engage in normal canine behavior, and absorbed the shocks without making any effort to ensure safety. They were passive, listless, unmotivated, and appeared depressed. They had learned to be helpless. They had "given up."

Human research on learned helplessness

Seligman's model provided the impetus for extensive research on humans of all ages in the 1980s⁸⁻¹⁰ and on the

elderly in the 1990s.¹¹⁻¹³ The studies on humans across the life span suggested four common themes in learned helplessness in humans. These are summarized in Table 1.

1. *No perceived control*. Persons who readily became helpless had made a false assumption at some point that, since they were unable to control one situation, they could not control others.

2. *No task involvement*. Individuals with a lack of reasonable mastery or control were less committed to some task that was personally important to them. They appeared less motivated; purposeless; and had limited interest in family, work, and community tasks.

3. *Disrupted daily routines*. The lives of many of these helpless persons became more disorganized. Meals were late or missed, deadlines were not met, energy decreased.

4. *Social isolation*. Social isolation was common to those with learned helplessness. They withdrew from others, if possible, and limited interpersonal interaction in other situations, where withdrawal was not possible. Many became depressed.

However, not every subject in every situation became helpless, and this led Seligman to revise his theory for human helplessness to include three necessary cognitive conditions.^{8,10} Persons who assumed excessive responsibility where others would not, who concluded that the overwhelming event at hand would be long-lasting, and who believed that the overwhelming event would negatively impact other actions taken by these persons were more likely to develop learned helplessness and varying degrees of depression.

In the 1990s, several papers addressed the general issue of learned helplessness in the elderly.¹¹⁻¹³ In addition, specific studies have reported on the association between helplessness or learned helplessness in patients with arthritis,^{14,15} ischemic heart disease,¹⁶ and progressive supra-nuclear palsy.¹⁷ Although some of these studies have not followed Seligman's conceptualization of learned helplessness fully, taken as a whole, the published findings¹¹⁻¹⁷ establish the presence of learned helplessness in some elderly and that the stance of learned helplessness appears to remain stable across the life span.¹⁸ Although alternative explanations for learned helplessness have been put forward,^{9,18} Seligman's cognitive psychological theory has remained the dominant model for understanding learned helplessness with frequent accompanying dysphoria and depression.

Stress-resistant persons

Medicine has long known that some individuals are more adaptive problem solvers than others and that their effective problem solving results in reasonable mastery, good physical and mental health, and less depression.¹⁻³

In a recent study of 1,200 adult men and women during a 12-year period, Flannery² identified several characteristics that were used by adaptive problem solvers to reduce life stress and to sustain good health and a sense of well-being. He refers to these individuals as stressresistant persons (see Table 1).

1. *Personal control.* Stress-resistant persons use reasonable mastery to address life stress. They identify problems accurately, gather information to solve the issue at hand, develop possible strategies for solutions, implement a strategy, and then evaluate it to see if it resolved the matter at hand.

2. *Commitment*. Stress-resistant persons were committed to some task that was personally important to them to see through to completion. The commitment provided a meaningful purpose in life. Examples included raising one's children, volunteering for community projects, advancing in one's career.

3. *Basic lifestyle choices.* Healthy problem solvers engaged in three tasks that contributed to their better health and well-being. They limited their intake of the stimulants nicotine and caffeine, engaged in 15-minute periods of daily relaxation, and participated in aerobic exercise at least 3 times a week for at least 20 minutes each time.

4. *Social involvement*. Adaptive problem solvers are not social isolates. They seek out others and know their interpersonal relationships can provide helpful information, companionship, social support, and occasional political or material favors.

Flannery² then developed the Project SMART program to teach the skills of adaptive problem solvers to those who did not use them. In developing this stress management intervention, he observed that the skills of stress-resistant persons appeared to be the very skills that persons with learned helplessness seemed to be lacking (see Table 1). He hypothesized that teaching the skills of stress-resistant persons to individuals with learned helplessness and its accompanying depression might resolve the stance of helplessness. The Project SMART stress management intervention might assist in shifting the perception of no control to one of reasonable mastery.

The Project SMART program

The Project SMART program² was designed to teach the skills of stress-resistant persons. Project SMART (Stress Management and Relaxation Training) is a group intervention with four component parts. The first component is a gradual reduction of the dietary stimulants of caffeine and nicotine. This is followed by relaxation exercises and then aerobic exercises. Finally, a stress inoculation procedure²⁰ is used to instill adaptive problem-solving skills through practice situations. Groups are colead by trained clinical counselors.

Groups of eight to ten persons meet weekly for ten sessions in this skills-based, task-oriented group. Individual sessions last for one and one-half hours, and all potential members are medically screened for any anxiety or depressionlike symptoms that might be related to medical illnesses apart from life stress, and to be evaluated and cleared for the aerobic exercise component.

During the first session, group members discuss common stressful life events that they share, have a short discussion of the physiology of stress, and commit themselves to making a small daily reduction in their intake of dietary stimulants for the coming week. Sessions two through four focus on increasing commitments to dietary stimulant reduction and add relaxation and aerobic exercises. Members are taught warm-up and cool-down exercises and are encouraged to begin with small manageable steps toward a goal of three 20-minute periods of exercise each week between sessions. During the group session itself, members go for a brisk 15minute walk and finish the session with 15 minutes of relaxation exercises. Sessions five through ten continue these three practices and add the stress inoculation procedure.²⁰ The procedure emphasizes verbal communication, appropriate nonverbal behavior, and direct skills practice by resolving a common problem selected by the group's members. The group coleaders arrange for increasing noncooperation during the practice session so that role-playing members develop additional skills for addressing noncompliance with reasonable requests.

Project SMART findings

To date, Project SMART groups have been used with individuals with anxiety and depression,² adult children of alcoholics,²¹ victims of psychological trauma,²² and persons with serious mental illness.²³ The empirical and anecdotal evidence suggests this intervention to be efficacious in restoring mastery, reducing life stress, reducing depression, and resolving learned helplessness. Individuals became more stress-resistant.

Discussion

Research implications

These early Project SMART findings^{2,21-23} suggest that this approach may be efficacious in resolving the stance of learned helplessness and the depression that often also accompanies it. Since Project SMART has been modified for the differing cognitive needs of trauma victims²² and persons with serious mental illness,²³ it is reasonable to assume that the program could also be adapted to the cognitive needs of persons with dementia. However, much empirical inquiry remains to be undertaken.^{8,10-13,23}

Although some of the Project SMART groups included elderly persons with some cognitive limitations and the stance of helplessness,^{2,23} the primary focus of these interventions was on stress management. No group was exclusively composed of elderly persons with dementia and learned helplessness. To evaluate the efficacy of Project SMART for this group, future research would need to include control groups with no stress management interventions or a control group with a stress management approach that is suitably different from Project SMART. These studies will need to adhere to Seligman's revised model of learned helplessness and to adequately assess the presence of learned helplessness in the demented. This assessment can be made in a variety of ways, including self-report scales if possible; semistructured interviews, family care given on healthcare provider ratings, or assessments of the long-term care setting environment.8,10,18,23,24

The Project SMART program itself may then need to be modified to address the specific cognitive deficits of the elderly demented with learned helplessness but in ways that remain consistent with the conceptual framework of the model. For example, the use of stretching exercises for the aerobic exercise component,²⁵ music therapy for the relaxation component,²⁶ and bingo in place of stress inoculation for mastery skills development are all possible modifications that would be consistent with the model.²⁷

These research design modifications along with standardized pre- and postintervention outcome measures and standardized training of group coleaders² should provide a reasonable assessment of the potential efficacy of Project SMART in addressing the stance of learned helplessness in the elderly demented person.

Clinical implications

Should subsequent research findings confirm the early findings of Project SMART to resolve or mitigate the stance of learned helplessness in elderly demented individuals, long-term care providers and family caregivers would have a cost-effective, readily learnable approach to addressing the stance of helplessness. After addressing the helplessness, other psychosocial rehabilitation efforts⁴⁻⁶ would be more effectively used by these patients to lessen or retard the effects of cognitive decline. Similarly, the early Project SMART studies^{2,21-23} appeared to be helpful in ameliorating general psychological helplessness and depression in many subjects. Should this finding continue to be replicated, Project SMART may be of additional assistance in treating general helplessness that is not learned helplessness per se and moderate depression that is psychological and not a specific component of a medical illness per se (e.g.,depression as a side effect of advanced alcohol abuse).

Finally, there is a third possible way in which the Project SMART model may be of assistance to long-term care staff. Recent gerontological studies have emphasized the need to maintain good quality of life for individuals with Alz-heimer's disease and other dementias.^{28,29} The skills of stress-resistant persons on which Project SMART are based are those that result in an enhanced quality of life and are consistent with gerontological papers emphasizing dietary habits,²⁹ relaxation exercises,³⁰ aerobic exercises,^{25,31} mastery skills,^{27,32} and group social supports.^{33,34}

Project SMART² is modular in design and flexible in its application. It can be done in groups or tapered to individual or family caregiver needs.³⁵ The basic components of Project SMART can also be used as separate group activities in a unit milieu program. Exercise, relaxation, dietary, and skills-based groups would form the milieu basics of this stress management intervention. Project SMART would appear to be one possibly helpful intervention in the multicomponent treatment plans of elderly patients with dementia.

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