

MOTIVATING SENIORS TO EMBRACE EXERCISE

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A pillar of distinction for Stonebrook Village at Windsor Locks and its sister facility, Colebrook Village at Hebron is a focus on fitness, promoted through the *Wellness-4 Later Life™*¹ program. At the core of our program is the maxim that being active in later life improves health and increases quality of life; and that these two combined preserves independence. This cutting-edge exercise program is led by an exercise physiologist (EP) who customizes exercise regimens for residents, accommodating for a range of chronic illnesses and functional limitations. A hallmark of our program's success is the addition of motivational approaches to maximize resident participation and improvement along the continuum of physical function². We offer this review of our program and the theoretical frameworks surrounding the concept of motivational readiness to change toward increasing physical activity, in the hope that other organizations, and perhaps individual families, will consider implementing techniques in motivational counseling within an exercise program, particularly those promoted to older adults.

The benefits of exercise among seniors in late life can be significant. There is consensus among private and public health organizations that physiological benefits can be achieved even by frail elders and the oldest of the population. The American Heart Association cites benefits such as reduced bone loss, improved hypertension, decreased coronary heart disease and improved control of type-2 diabetes. The *American College of Sports Medicine* finds that older adults with physical impairments and chronic conditions can improve health and function from engaging in regular exercise. In contrast, numerous organizations point to research that sedentary living is a leading cause of poor quality of life, disability and death³.

We are proud to witness Stonebrook's fitness center bustling every day with residents attending to one-on-one exercises with the staff EP or the resident's physical therapist. In our owners' previous communities, efforts to induce increased use of the fitness area through placement of fancy treadmills, the latest model stationary bikes and the best strength equipment was having little effect on inducing more residents to exercise. The choice to invest in a professionally-led exercise program stems from knowing the potential benefits of physical activity among seniors and seeing that equipment alone was not enough of a motivating force to induce more residents to engage in exercise as an activity. Senior living communities across the United States offer group classes such as yoga or Tai Chi to seniors who can self-regulate physical activity. *Wellness-4 Later Life™* was carefully planned to not only adopt those popular light-intensity exercises such as Tai Chi, but also more complex and higher-intensity exercises which can have a real and positive impact preserving independence because risk of falls or

¹ *Wellness-4 Later Life* is our trademark wellness model which adopts the seven dimensions of wellness described by the International Council on Active Aging, but modified to suit persons in late life.

² *Continuum of Physical Function*, (2017) International Council on Active Aging, Vancouver, BC.

³ *American College of Sports Medicine's Exercise Management for Persons with Chronic Disease and Disabilities*

adverse medical events are minimized through the EP's coaching and person-centered wellness plans.

Our staff recognizes that many residents have difficulty self-regulating exercise due to a multitude of reasons. Many have valid concerns about falls with injury, heart attack, being injured while exercising or some lack confidence being able to perform exercises safely. These issues pose legitimate barriers toward exercise. We concluded that exercise professionals could be utilized to introduce exercise techniques, determine individualized fitness goals, and boost resident confidence. *Wellness-4 Later Life™* is professionally-led in large measure to assist residents to work through barriers many unique to senior life, and enhance their motivational readiness to adopt a more physically active lifestyle. Perhaps the most effective motivation though is the heart of most residents' fears: a risk of being admitted to a nursing home. Indeed, AARP surveys indicate almost 85% of older adults do not want to go to a nursing home. In recognition of the real concerns among residents of being placed in a nursing home due to declining physical function, our program focuses on "functional fitness" which includes divided attention testing such as balancing while telling the time on a clock, so residents have compelling reasons to use exercise as a tool to preserve independence. Functional fitness training focuses on improving any level of fitness through muscle strength, balance, flexibility and aerobics. It mimics daily living actions such as stairclimbing, getting out of bed, standing up from a chair and walking with or without assistive devices.

The rewards from helping residents attain the optimal benefits of exercise are obvious; however, inducing buy-in from residents who have disabilities requires that the program assuages the real concerns about injury. In our exercise program, the risks of injury or adverse medical events are mitigated through policies and procedures which adhere to good, standard safety protocols. The program is specially designed to accommodate for chronic illness and activity limitations and it starts with thorough assessments and fitness tests. Residents are assigned safety levels that we have established, and the EP customizes the fitness activities based on the levels, which range from L1 (restrict to chair-based exercise) to I (independent). The EP reports to the RN supervisor, and together they review other assessments including the PHQ2 and the PHQ9, utilized for depression screening, as well as the primary care physician consent to participate. Residents participate in fun group classes and one-on-one sessions where the EP works on reassessing and moving residents to the next program level, which introduces them to more challenging exercise regimens. By implementing a geriatric-focused exercise program, more residents have shown a willingness to participate.

Despite the popularity of the program for many residents and our efforts to remove common barriers to exercise, a few residents may remain reluctant to participate in exercise. We have set high expectations of staff to promote community-wide support. We believe that to ensure the transformation of the entire community to a wellness culture, staff's best efforts would focus on successfully motivating inactive residents who lacked any interest in exercise. We also understand that to be an effective change agent, our staff would need to acquire techniques and skills in motivational counseling to help those residents modify their behavior, alter their thinking and change their attitudes toward exercise. We offer several techniques

popularized in our exercise program which staff can apply when counseling residents about their motivational readiness to change toward being more physically active.

Motivational Interviewing Technique (MIT) MIT, is a popular motivational tool deployed to promote adherence to exercise in chronically ill seniors. MIT applies the 7A's model of exercise counseling: Addressing the topic of exercise and gauging the response; Asking whether the client is regularly physically active and satisfied with her physical functioning and gauging the response; Advising the client to pursue a more active lifestyle to maintain physical functioning and gauging the response; Assessing the client's readiness to change, especially noting barriers to change; Agreeing on a client-selected plan; Assisting in an active way to find to find solutions and overcome barriers with the help of the client; and Arranging for follow-up to ensure the client succeeds in becoming more active. ⁴

Transtheoretical Model of Behavior (TTM) In addition to motivational interviewing, we introduced our staff to some effective techniques known to work on persons who struggle to change behaviors. The most prominent theory of behavioral change, TTM was developed by James Prochaska and colleagues.⁵ TTM is a model of intentional change that focuses on the decision-making abilities of the individual. TTM operates on the assumption that people do not change behaviors quickly and decisively but methodically and incrementally.

TTM is not a theory but a behavioral change model deployed when a person desires to replace a specific behavior, such as sedentary living, with another behavior, such as physically active living. TTM integrates other behavioral change theories including "stages of change," "processes of change," "decisional balance," and "self-efficacy." The stages of change model (SOC) lies at the heart of TTM. SOC describes five stages: pre-contemplation, contemplation, preparation, action, and maintenance. Other behavioral change theories (e.g. self-efficacy) are applied within the stages depending on the person, and the stage of readiness to change, to help them reduce resistance, facilitate progress, and prevent relapse.

In the book *Motivating People to be Physically Active*, TTM was applied to exercise behavior as follows:

- Stage 1: (not thinking about change) Inactive and not thinking about being active; this includes people who do no physical activity and do not plan to do so for the next six months;
- Stage 2: (thinking about change) inactive but thinking about becoming more active;
- Stage 3: (barely active) doing some physical activity but not at recommended levels;
- Stage 4: (almost habitually active) active but for less than six months;

⁴ The *American College of Sports Medicine's Exercise Management for Persons with Chronic Diseases and Disabilities*,

⁵ Prochaska, Fava, Norman, & Redding, 1998

- Stage 5: habitually active.⁶

These are the five stages of change we look to apply when counseling residents, but modified to address the common barriers posed by seniors such as fear of falling or anxiety about having an adverse medical event. When discussing a resident's readiness to participate in exercise or other aspects of our wellness model, our staff determines which of the five stages the resident falls within, and then works with that individual to bring about changing behaviors toward the next stage of readiness. Some residents demonstrate readiness for exercise immediately and are enrolled into the exercise program without a need for counseling. For residents who express an unwillingness to exercise, our staff spend the time necessary to identify the individual's barriers toward exercise, and then to work to remove the barriers, while progressing that resident to the next stage.

It is common at Stonebrook for the EP to visit reluctant residents, many of whom are sedentary, in their apartments, to begin the discussion on how to motivate them to change from being inactive to active. The EP often asks the resident to take a short walk, at which time the EP employs behavior change strategies. Examples of techniques used to increase readiness to move to the next stage include:

- increasing the resident's knowledge base for exercise, its benefits, and our safety protocols;
- introducing the resident to very short exercise programs in the unit to desensitize their fear of exercise, and;
- discussing ways to improve their confidence for performing exercise.

Social Cognitive Theory/Self-Efficacy There is a theoretical construct to gauge *confidence to perform exercise* called Social Cognitive Theory and its theory of "self-efficacy," which states that specific efficacy (confidence) expectations affects behavior, motivation, thought patterns, and emotional reactions in response to a situation.⁷ Our EP understands that when attempting to motivate a resistive resident to enroll into the exercise program one major concern is usually whether and to what extent that resident has an optimistic self-belief of being able to perform exercise or a fear they cannot. Self-efficacy is a helpful tool to detect insecurity and lack of confidence in residents who decline invitations to exercise. Our EP is trained to work with residents and build them up to a stronger level of self-efficacy, through encouragement, and the use of small steps and successes.⁸

Self-efficacy techniques can be applied in each of the five stages of readiness. There are a variety of scales and readiness-to-change questionnaires which offer meaningful tools to help the counselor work through stages of readiness with the counseled person. An example of some questions includes: "Do you feel motivated to engage in an exercise program which involves strength, balance, and endurance building exercises of approximately 3 times per

⁶ Bess H Marcus and Ann H Forsyth Second Edition, *Human Kinetics*

⁷ *Health Promotion Practice*, 2006; Vol. 7; No. 4; 428-443

⁸ Dzewaltowski, Noble, & McElroy, 1992

week, 45 minutes in duration”: “How motivated are you to engage in an exercise program which involves strength, balance, and endurance building exercises of approximately 3 times per week, 45 minutes in duration”; the counselor scores each answer 0 to 3, which transposes to a determination about the person’s stage of readiness to change.

Outcome Expectations for Exercise Scale is another popular scale used in exercise programs to assess motivational readiness to change. Outcome Expectations for Exercise Scale (OEE) has nine items and is scored using a 5-point scale specific to exercise.⁹ The questionnaire is important in not only gauging a person’s level of self-confidence for exercise, but also in revealing the level of physical activity a resident is currently engaged in.

One important question in the OEE scale asks, “If I engage in regular exercise, at least 3 times per week, for 45 minutes, it will reduce the chances that I will have to move into a nursing home.” This single question and answer tells us much about whether a person will have extra motivation to perform functional fitness training to preserve independence. There are also 4 additional items added to the OEE that focuses on negative expectations associated with exercise such as “Exercise causes me to feel shortness of breath,” “Exercise causes me to have pain,” “Exercise causes me to fall and get hurt,” and “Exercise causes too much stress on my heart.” We encounter resistive residents who believe they are too unhealthy to participate in exercise and these questionnaires allow our staff to probe residents on how health concerns affect their confidence to engage in exercise. We then educate the resident how we can introduce them to exercises which accommodate for their health issues and we demonstrate how the exercises we prescribe for them will be safe. Again, the goal is to work through barriers incrementally to get the resident to progress only to the next stage of readiness.

A 2008 study examined how self-efficacy affects motivation to engage in physical activity: it concluded that incorporating self-efficacy into the design of a physical activity intervention, aimed at improving the self-perception of exercise self-efficacy, can have positive effects on confidence and the ability to maintain an exercise regimen.¹⁰ Techniques derived from the study include: helping residents attain small performance accomplishments; taking small steps toward becoming more physically active; vicarious learning-watching a class; and giving them regular verbal encouragement. Our staff applies these techniques to boost a resident’s confidence about performing exercise.

Decision-Making Theory (DMT) This theory for behavior change attempts to explain how people decide whether to engage in a particular behavior based on the comparison between the perceived benefits versus the perceived costs of the behavior¹¹. People are more likely to be physically active if the benefits of being physically active outweigh the costs. This is “decisional balance”. Our EP utilizes DMT to persuade residents to *choose* to participate in exercise. Our EP helps residents who resist exercise to construct their unique decisional

⁹ *Int’l J. of Nurse. Stud.* 2008, titled, “Using Self-efficacy Theory to Develop Interventions that help Older People Overcome Psychological Barriers to Physical Activity”

¹⁰ *International Journal of Nursing Studies*, 2008, titled, “Using Self-Efficacy Theory to Develop Interventions that help Older People Overcome Psychological Barriers to Physical Activity”

¹¹ *Marcus, citing Janis & Mann, 1977*

balance scale by helping them understand all the pros for exercise while acknowledging the cons as well. Some residents' "cons" are psychological barriers such as ageism bias, or harboring a perception of exercise as too self-indulgent. The process of identifying what to include on the pro/con list is an important component of the strategy as it induces the person to see the evidence why exercise would be a positive lifestyle change for them.

Process of Change While stage of change explains when changes in cognition, emotion, and behavior take place, the Process of Change helps explain how those changes occur. There are 10 processes which can be divided into two groups: cognitive or experiential processes are in one group, while behavioral processes are in the other group.

Cognitive strategies include increasing one's knowledge about the benefits of exercise, identifying the residents' perceived risks of exercise and helping them reduce those risks; caring about the consequences of participating in exercise in relation to others (relatedness); comprehending the benefits through outcome measures and rewards, and increasing healthy opportunities which feel good.

Behavioral strategies include substituting alternatives (fun activity instead of pleasurable inactivity), enlisting social support using exercise, rewarding oneself after exercising, committing, and reminding oneself to exercise. We allow our staff flexibility to employ cognitive and behavioral strategies which might be effective for individual residents when attempting to induce them to exercise.

Self-Determination Theory (SDT) SDT posits that there are three basic needs: autonomy, competence, and relatedness; and they are innate tendencies which strongly impact our psychological growth in all phases of life. According to this theory, people continue to gravitate to situations and activities that satisfy their need for autonomy (independence), competence (abilities), and relatedness (socialization). A recent consumer report survey of over 2000 older adults revealed that seniors remain eager to maintain a high quality of life and place importance of remaining independent, staying mentally sharp, and mobile into later life.¹²

Researchers in gerontology studying exercise in the elderly population concluded that self-determination theory can be used to explain why seniors continue to want to fulfill their basic psychological needs including exercise if it helps them maintain self-control well into later life¹³. As the Dacey article claims, "when older adults experience physical activity in a way that meets their needs for autonomy and personal control, they are more likely to be intrinsically oriented toward being physically active". The SDT theory reinforces the logic for our exercise program in promoting functional fitness as a tool to preserve independence.

Behavioral Choice Theory (BCT) When our staff attempts to explain how people decide among behavioral options available to them, they use BCT. According to this theory, "people have a choice between being sedentary and being physically active and this choice is influenced by many factors, such as the availability of physical activities, versus sedentary activities, perceived benefits versus barriers, reinforcements (i.e. rewards, both tangible and perceived),

¹² UCLA, Center for Policy Research on Aging

¹³ Marie L Dacey and Renee Newcomer, *Topics in Geriatric Rehabilitation*, (2005) 21 (3) 195-204,

and degree of effort.”¹⁴ Closely associated to BCT, is **Learning Theory (LT)**. LT is another theoretical construct which posits that a person is more likely to be physically active when the right circumstances are in place and pleasurable consequences occur because of physical activity. LT acknowledges that starting off small, and progressing slowly, a process called shaping, is important so that the exerciser feels a sense of accomplishment in whatever level of exercise they perform. LT negates the “no pain, no gain” mantra and instead suggests that pleasurable consequences are what induces long-term commitments to exercise in older adults.¹⁵

Our program does not emphasize having residents meet minimal doses of exercise as other exercise programs do; rather, our program offers light-intensity exercises to all residents which are pleasurable, fun, social and meaningful to motivate them to commit to exercise habitually while at the same time, offering to those who are willing, higher-intensity and more complex exercises focused on functional fitness. Our graduated approach to exercise considers the psychological influences which affects our resident’s motivational readiness to exercise.

Yet, even with a mastery of counseling methods and behavior change techniques, some people remain stubbornly unwilling to adopt healthier lifestyle habits even after they are counseled about the benefits of a change to healthy living. The reluctance to do for oneself that which helps maintain a high quality of life seems paradoxical. However, empirical evidence shows that health and attitude often run parallel to one another which might explain why people who perceive themselves as unhealthy may adopt poor attitudes about reversing that status.

Erik Erikson, a pioneer in the development of psychology, theorized that the correlation between health and attitude is one of the potential crises faced at the human development stage integrity vs. despair.¹⁶ Integrity highlights people who coped well during their life crises and who emerged with stronger ego. Those in despair coped poorly in crises, and emerged with weaker ego. During self-reflection in later life, older adults reveal being mostly satisfied or disappointed. We encourage our staff to consider symptoms of depression vs. life patterns, and to report symptoms to the nurse.

A 2006 study found that a person’s level of satisfaction (lack of despair) in later life played a key role in their behavioral motivation.¹⁷ Participants with severely limited mobility more often reported poor health, fear, negative experiences, lack of company, and unsuitable environment as barriers to exercise. Whereas those with no mobility limitations reported positive health and a motivation to exercise. Another study found connection between good health and strong psychological resilience and determined that resilience is a skill which can be improved upon in later life.¹⁸

¹⁴ Bess H Marcus and Ann H Forsyth *Second Edition, Human Kinetics*, p. 26.

¹⁵ Bess H Marcus and Ann H Forsyth *Second Edition, Human Kinetics*, p. 22.

¹⁶ Dacey M. & Newcomer, R (2005) *A client-centered counseling approach to motivating older adults towards physical activity. Topics in Geriatric Rehabilitation*, 21 (3) 195-204.

¹⁷ *Journal of Aging and Physical Activity*, 2006; 15(1) 90-102,

¹⁸ Lavretsky, *Resilience & Aging*, Johns Hopkins Press, 2014

Our exercise program takes the approach recommended by Dacey and Newcomer, who recommend a “client-centered approach” to counseling. Those experts observe that good counseling is less about the number of steps or minutes walked “than it is about helping patients overcome barriers... many of which are deeply embedded in their way of life and sense of self.”¹⁹

The essentials of a client-centered approach based on motivational interviewing includes establishing rapport with the person, mutually setting an agenda, for discussion, understanding and exploring how ready the person is to change his or her behavior, discussing how important being physically active is to the person, and helping to build feelings of confidence, that change is possible. The art of persuasion is enhanced when the counselor seeks to understand what psychological forces are at play in perpetuating the person’s reticence to embrace more physical activity.

We at Colebrook Village and Stonebrook Village are proud to have introduced our exercise physiologists to counseling techniques and skills so that they are well prepared to work with residents. Ultimately, this achieves our wellness goals for our residents and community. We take pride as a senior living organization in setting high expectations of staff for achieving high participation rates on all our wellness initiatives but particularly our exercise program. Those interested in learning more about our innovative exercise program are urged to contact the Executive Director’s at Stonebrook and Colebrook Village.

This article was written collaboratively by the Executive Directors at Colebrook Village at Hebron and Stonebrook Village at Windsor Locks. If you or someone you know would like more information on our distinctive programs and services, please contact us.

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¹⁹ Dacey M. & Newcomer, R (2005) A client-centered counseling approach to motivating older adults towards physical activity. Topics in Geriatric Rehabilitation, 21 (3) 195-204