POINT OF
VIEW

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Goal Setting and Action Planning for Health Behavior Change

Abstract: *Health behavior change is challenging for most individuals, but there are many strategies that individuals can use to facilitate their behavior change efforts. Goal setting is one such strategy that assists individuals to identify specific behaviors to change and how to go about doing so. For many, however, simply setting a goal seldom leads to actual behavior change. For some, identifying an appropriate goal is difficult, while for others, putting goals into action is the roadblock. Two strategies may be of assistance for setting and achieving goals. First, consideration of key goal characteristics (eg, approach vs avoidance goals, performance vs mastery goals, level of difficulty) may result in selection of more appropriate and feasible goals. Second, action planning can help individuals put goals into action. Clinicians can help patients utilize these strategies to set and achieve goals for health behavior change.*

Goals are mental representations of desired outcomes,[1] and goal setting is the process by which one identifies specific goals and determines how they will be achieved.[2] Because there are many ways in which one's health can be improved, identifying specific and actionable goals is important for facilitating health behavior change. Setting a goal for health behavior change, however, is seldom sufficient for behavior change to actually occur. One need only consider the countless number of unfulfilled New Year's Resolutions to know this to be true.[3] Called the "intention-behavior gap," numerous studies have demonstrated that intention to change behavior alone does not often result in actual behavior change.[4-6] Intention precedes action; therefore, one must *act* on one's intentions in order to change behavior.[4,6] Transforming intentions into action, however, can be challenging. Fortunately, research on goal setting in recent years has yielded strategies for helping people set and achieve desired goals,[1,2] which can be utilized by clinicians (ie, physicians, nurses, allied health professionals, etc) to expedite patients' behavior change efforts. Two such strategies include considering goal characteristics when setting goals and creating action plans that facilitate goal achievement.

Goal Characteristics

There are many factors to consider when it comes to setting goals. Should

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goals specify actions to take or actions to avoid, focus on measurable outcomes or on skills to be developed, or be challenging or easy? The answers to these questions are important because they can influence goal achievement. Mann et al[2] reviewed each of these goal characteristics, which should be considered when setting health behavior goals.

Approach Versus Avoidance Goals

Approach goals help individuals move toward desired outcomes, whereas avoidance goals help individuals move away from undesired outcomes.[7] An example of a positively framed approach goal might be "I'm going to eat a cup of low-fat yogurt for my afternoon snack," whereas a negatively framed avoidance goal might be "I'm not going to eat junk food as a snack." Although these goals appear to be similar in terms of promoting healthy snacking, psychological investigation has shown that different cognitive and emotional processes are involved. Approach goals are associated with greater positive emotions, thoughts, and self-evaluations and greater psychological well-being.[7,8] In contrast, avoidance goals are associated with fewer positive thoughts and greater negative emotions.[7,8] Given these findings, setting approach goals may be more helpful than setting avoidance goals for helping patients change their health behaviors.[2] Clinicians can help patients convert avoidance goals into approach goals by substituting behaviors to avoid with behaviors to promote, as illustrated in the following example: "Rather than watching television after dinner, I will walk around the block for 20 minutes instead."

Performance Versus Mastery Goals

Much of what is known about performance and mastery goals has come from psychological studies of learning. Performance goals involve judging and evaluating one's ability, whereas mastery goals (also called learning goals) involve increasing existing abilities and learning new skills.[9] Failure to achieve a performance goal may be interpreted as a failure of one's abilities, but challenges that arise as one pursues a mastery goal are viewed as a natural part of learning, and encourage problem-solving and active engagement.[9] Furthermore, mastery goals are associated with improved self-efficacy (ie, one's confidence in one's ability to

perform a specific action), performance, and knowledge.[10]

These findings can inform the selection of health behavior goals in at least two ways. First, performance goals should not be set in the absence of mastery goals. If one sets a performance goal to lose 10 pounds over the next 4 weeks and then failed to do so, one might interpret this as a failure and attribute it to an inherent inability to lose weight. A more appropriate approach would be to supplement the performance goal with one (or several) mastery goals. For example, to facilitate the aforementioned weight loss performance goal, one might set a mastery goal to learn to prepare nutritious meals or to learn a new recreational activity that encourages physical activity. Second, mastery goals may help individuals persist in their behavior change efforts when feeling challenged or discouraged. Because mastery goals encourage problem solving and active engagement,[9] failing to achieve a specific mastery goal may provide feedback that a particular approach for achieving the goal was insufficient and that a different approach should be considered. In this way, mastery goals may promote self-evaluation of current efforts and problem solving for future attempts. Although additional research is needed to understand performance and mastery goals within the context of health behavior change, setting mastery goals in the pursuit of a broader performance goal may be helpful for patients in their behavior change efforts.

Difficult Versus Easy Goals

Knowledge about goal difficulty has largely resulted from studies in organizational psychology, which have consistently demonstrated that challenging goals produce better results than easy goals, particularly when one is committed to the specific goal.[11] In contrast, easy goals are associated with low effort and decreased performance.[12] Goal commitment is influenced by many factors, including intrinsic motivation and self-efficacy.[11] Intrinsically motivated goals are inherently rewarding to the

individual, and therefore an individual may be more willing to attempt an intrinsically motivating goal in spite of its difficulty.[13] Additionally, intrinsic motivation is associated with improved learning and performance,[14] which may facilitate goal achievement. Within the context of health behavior change, these findings suggest that a challenging goal that is intrinsically motivating to a patient may be more beneficial than an easy, effortless one.

Self-efficacy, or confidence in one's ability to achieve a specific goal, also influences goal commitment. Setting and achieving challenging goals can enhance self-efficacy,[11] but repeated failure to achieve a goal can result in diminished self-efficacy, decreased satisfaction, and impaired future performance.[15,16] One need only consider the phenomenon of learned nonuse after stroke, where repeated failure to successfully perform a task using one's impaired limb can lead to complete nonuse of the impaired limb, to understand how very challenging goals can lead to decreased self-efficacy and subsequent performance.[17]

The optimal level of goal difficulty for any given individual will be influenced by goal commitment, motivation, and self-efficacy. As such, clinicians should encourage patients to set goals that are intrinsically motivating. Although a discussion of assessing and harnessing motivation is beyond the scope of this article, clinicians may find resources on Motivational Interviewing[18,19] informative.

Other Goal Characteristics

The SMART criteria are a relatively well-known set of rules for goal specification. This acronym stands for Specific, Measurable, Achievable, Realistic, and Timed,[20] and it grew out of business/organizational culture. Following these criteria, patients create specific goals with well-defined criteria for success. An example of a SMART goal is, "I will engage in 30 minutes of aerobic physical activity 5 days a week for the next 4 weeks." Well-defined goals are necessary for goal attainment because they help individuals focus their

desires and intentions and create a standard by which success can be measured. Furthermore, using the goal characteristics described above, a SMART goal should be intrinsically motivating, approach and mastery based, and appropriately challenging. A limitation of SMART goals, however, is that they do not specify *how* the goal will be implemented. In the example mentioned above, physical activity can be achieved in various ways: walking around the block, running on a track, going to the gym, one 30-minute bout of physical activity, or three 10-minute bouts of physical activity. To facilitate implementation of SMART goals, clinicians can help patients develop action plans.

Action Plans

Action plans specify *where*, *when*, and *how* a goal will be implemented[21,22] and help individuals plan the specific actions they will take to achieve their overarching goal. Important action plan characteristics include being conceived by the individual, shared with others, and of short duration (ie, 1 week duration and reevaluated weekly).[21,23] If a SMART goal is considered a long-term goal, then an action plan is a short-term goal, specifying the steps by which the SMART goal will be achieved. Additionally, one must be confident (ie, self-efficacy) in one's ability to carry out the action plan. Often, patients are asked to rate their confidence for carrying out their action plan on a 10-point scale. If patients rate their confidence lower than a 7, a more feasible action plan should be selected.[21] Like mastery goals, action plans—due to their short duration and frequent reevaluation—provide feedback to the individual on whether the chosen action plan was appropriate or if it needs to be modified.[4,15]

Action planning has been studied in primary care settings. In a proof-of-concept study, Handley et al[24] tested an action plan intervention in patients with coronary heart disease, which involved 375 patients and 43 physicians across 8 clinical practices. The intervention

occurred during a regularly scheduled clinical appointment. Using an Action Plan Form, physicians asked patients to identify a general goal (eg, become more physically active, improve food choices, reduce stress), create an action plan for accomplishing the goal, and rate their confidence for carrying out their action plan. During a follow-up phone call 3 weeks after the action plan was made, not only did most patients recall making the action plan, but 53% reported making behavior change consistent with their action plan.[24] Furthermore, the physicians involved in the study reported that the behavior change discussion only took an average of 7 minutes to complete; physicians also reported that the discussions were equally or more satisfying than previous behavior change discussions they had with patients.[25] These results are encouraging for patients and clinicians alike because they suggest that a brief discussion involving action planning can be implemented in clinical settings and that many patients who develop action plans are likely to implement those plans.

Coping Plans

Closely related to action planning is coping planning, which is the process of anticipating barriers and challenges that may interfere with action plans and making plans to overcome such barriers.[6] Whereas action plans are designed to initiate desired actions, coping plans are designed to "shield" action plans from distraction and derailment. If one's action plan is to walk around the neighborhood for 10 minutes after dinner each evening, one can easily be derailed by bad weather. However, if one created a coping plan (eg, walk on a treadmill, turn on an exercise video, perform a 10-minute exercise routine using resistance bands or weights) in advance of the bad weather, one would be less likely to be derailed from one's overall goal of being more physically active. Importantly, use of both action and coping plans for health behavior change confers greater benefits than action plans alone.[26] Thus, clinicians can assist patients in their behavior change efforts

by helping their patients create action and coping plans for carrying out specified goals.

Limitations

Setting appropriate goals and creating action plans can help transform intentions into action, but they cannot guarantee behavior change. There is no substitute for volitional action: Having set a goal and developed an action plan, one must act upon it.[6] For this reason, the suggestions provided in this article should be considered when setting goals and creating action plans. Furthermore, goal setting and action planning need not be used in isolation. Many strategies for facilitating health behavior change exist (eg, self-monitoring, enlisting social support, problem solving, skills training), which can (and should) be used in conjunction with goal setting and action planning.[27]

Conclusion

Health behavior change is not an easy process, but clinicians are well positioned to encourage and help patients in their behavior change efforts. Specifically, clinicians can help patients set appropriate goals and create action (and coping) plans for achieving those goals. When setting goals and creating action plans, patients need to understand that the way in which goals and plans are framed matters: goals and action plans should be approach and mastery based, appropriately challenging, and intrinsically motivating. Furthermore, action plans can help specify the steps patients will need to implement to achieve their goal. Their 1-week timeframe provides patients with immediate feedback about their efforts, thus allowing patients to "try out" different strategies for discovering what does and does not work, and building self-efficacy in the meantime. Goal setting and action planning for health behavior change need not require a significant amount of time, and although it does require effort, both clinicians and patients may benefit from making goal setting and action planning a priority.

Ethical Approval

Ethical approval was not sought for the present study because the work does not involve animal or human research.

Informed Consent

Not applicable.

Trial Registration

Not applicable. AJLM

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