

# Prescribing Pleasure and Meaning Cultivating Walking Motivation and Maintenance

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## Introduction

Regular physical activity such as daily walking has numerous health benefits.<sup>1</sup> Walking is a simple type of physical activity that can be done almost anywhere and is the most commonly reported form of physical activity among adults. CDC data show that people who walk are three times more likely to meet the physical activity guidelines than those who do not.<sup>2,3</sup> Encouraging inactive individuals to integrate walking into their daily routine has the potential to yield significant public health benefits.

To promote walking among Americans and achieve these benefits, new population-wide initiatives are being launched, including an upcoming Surgeon General's Walking Call to Action (planned release Fall 2014) and the EveryBody Walk! initiative. How health professionals and organizations communicate about walking brands it to the public<sup>4</sup> and will influence the ultimate success of this new walking movement.

Messages to promote walking that deliver accurate health information but ignore evidence-based principles of motivation and decision making, the underlying mechanisms of behavioral sustainability, will inadvertently undermine these population-level initiatives. To optimize the behavioral impact of these national initiatives, the messaging to promote walking delivered in communities and health clinics should be informed by relevant affective and behavioral science.

It is important to shift from a medical to a marketing paradigm to move beyond simply delivering health education to actually motivating consistent walking behavior. Although counterintuitive, the benefits of walking typically emphasized by clinicians and social marketing, such as "better health" and "disease prevention," are not the same

ones that will optimally motivate inactive individuals. This Current Issue reviews key evidence-based concepts to reframe the motivation for walking and inform more strategic walking messages to deliver in apps, interventions, clinical visits, and population-level health initiatives.

## Adherence Through Autonomy

Self-determination theory (SDT) addresses how to foster optimal types of motivation and investigates how "controlled" and "autonomous" types of motivation distinctly influence behavioral adherence.<sup>5</sup> Controlled motivations reflect when people consider walking as a "should"—something they need to do to avoid a punishment (e.g., higher healthcare premiums) or comply with an external pressure (e.g., following a clinician prescription to lose weight). By contrast, when people have autonomous motivations, they deeply value the benefits they get from walking or the inherent pleasure and satisfaction that walking brings.

Having autonomous motivation for physical activity results in better behavioral pursuit, self-regulation, and sustainability. A systematic review<sup>6</sup> of SDT and physical activity found consistent support for a positive relationship between more autonomous forms of motivation and physical activity. It also reported that controlled forms of motivation were positively, negatively, or had no association with participation. Although having a controlled form of motivation can motivate people to start exercising, in general, it has less consistent and often negative relationships with ongoing participation compared to autonomous motivation.

In other words, when people's core needs and goals drive their decision to walk, they have higher-quality motivation and are more likely to maintain it compared to walking to comply with external mandates or "shoulds." Furthermore, this review suggested that "intrinsic" motivation, or being active for the inherent pleasure it brings, was the type of motivation most strongly associated with sustainability. Thus, walking messages promoting autonomy and intrinsic experiences such as pleasure will better motivate regular walking.

## Affect Influences Decisions

Other research relevant to designing walking communications relates to how physical activity influences people's affect (e.g., feelings). Positive affect refers to pleasant

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feelings whereas negative affect refers to unpleasant ones. The affective response from walking is important to consider because affect drives people's daily decisions,<sup>7</sup> and regular walking is determined by whether people consistently decide to walk.

Furthermore, people's behavioral choices are motivated by their feelings about the outcomes from their decisions in the present.<sup>7</sup> People approach what feels good and avoid what feels bad.<sup>8</sup> At the point of decision, how people feel about walking compared to the alternative options will influence whether they decide to walk out the door or stay on the couch. Thus, whether people have positive or negative feelings about the process of walking has important implications for sustainability.

### Affect Is Influenced by Exercise Intensity

Influential researchers have been studying the impact of differing exercise intensities on individuals' ratings of affect for over two decades.<sup>9</sup> A review<sup>10</sup> of studies on the relationship between exercise intensity and affect concluded that, in general, there is an inverse relationship between exercise intensity and affective responses while exercising that follows a dose–response pattern. In other words, the harder someone exercises the more their pleasure decreases.

Furthermore, when people exercise at intensities that exceed the “ventilatory threshold” (i.e., the point at which it is hard to hold a conversation during exercise), not only is their pleasure significantly reduced but displeasure increases as well. Interestingly, this review also found that when people decide on their own to exercise at high intensities they tolerate it better and experience less displeasure compared to when higher intensity exercise is imposed on them.

Thus, although sub-ventilatory threshold exercise (e.g., walking below the point of heavy breathing) tends to result in greater pleasure and lower displeasure, when someone autonomously chooses to exercise at higher intensities their affective response is not undermined.<sup>10</sup> This finding aligns with the SDT literature. When a practitioner or message recommends that individuals “walk in ways that feel good” it gives people permission to self-determine how they want to walk. Therefore, framing walking as a strategy to enhance well-being and pleasure explicitly encourages people to autonomously determine how they want to walk (e.g., intensity).

Traditionally, physical activity recommendations have been one-size-fits-all prescriptions based on a “dose–response” concept from research linking physical activity dose to health biomarkers and illness prevalence. As Ekkekakis et al.<sup>10</sup> discuss, there is growing awareness among leading organizations such as the

American College of Sports Medicine of the influence of intensity on affect and adherence. Furthermore, although walking to fulfill the current “moderate” intensity recommendation<sup>3</sup> is likely to be pleasant for some, it remains prescriptive in nature.

The research reviewed above and other key commentaries<sup>9</sup> suggest that prescribing physical activity in medically based “doses” to optimize health outcomes undermines adherence through inadvertently thwarting autonomy and positive affect and increasing negative affect: a formula for wanting to avoid rather than approach walking.

### Positive Affect Rewards and Motivates Behavior

Affective neuroscience offers additional insight into why promoting walking for pleasure and other positive feelings should enhance adherence. The neuroscience of reward is rooted in two different systems: “wanting” and “liking.”<sup>11</sup> Liking reflects hedonic, pleasurable feelings. Wanting reflects desiring a salient reward or action, something that motivates approach behavior. Similar to a Pavlovian response, this general neuroscience suggests that learning that there is a positive association between a specific behavior (e.g., walking) and a reward such as pleasure (i.e., “liking”) should trigger a “wanting” to walk, and consistently motivate walking behavior.

A 6-week physical activity intervention designed to create sustained participation through having participants identify personally meaningful motives and pleasure-based activities was implemented in the community and evaluated (N=50).<sup>12</sup> Participants changed their perceptions about physical activity from an obligation (a “chore”) to a “gift” that felt good to do. At the study follow-up, on average 10 months post-program, participants sustained a 65% increase in participation compared to baseline ( $p < 0.01$ ).

Other research compares messages featuring positive affective benefits (e.g., “feel better”) against health-related messages (e.g., “reduce your diabetes risk”) in predicting physical activity. One randomized study investigated whether affective or cognitive health-related messages about the benefits of physical activity predicted more participation among college students (N=316).<sup>13</sup> This study found that messages featuring affective benefits consistently resulted in higher participation than the health-related ones ( $p < 0.01$ ). Another study among older adults (aged 60–95 years) compared the effects of health-related and affective “feel-good” expected benefits from exercising at baseline with participation at 12 months post-baseline.<sup>14</sup> Health-related benefits did not predict participation but “feel-good” benefits did.

Convention suggests that emphasizing health as the purpose for walking is a logical, optimal motivator given that most people value being healthy. Yet, if people's primary objective for walking is to benefit their health they might not experience any obvious immediate rewards that reinforce their motivation. Because individuals disengage from behavioral pursuits when they do not receive sufficient feedback that they are progressing,<sup>15</sup> larger delayed rewards for walking, like preventing illness, will not be as motivating as smaller, immediate rewards, like experiencing pleasure (i.e., delay discounting).<sup>16</sup> Furthermore, walking takes time and constantly competes with other daily responsibilities. Thus, to achieve long-term adherence, people must consider walking to be compelling enough to trump other daily priorities, consistently.<sup>17</sup>

### Walking Toward Pleasure, Meaning, and Well-Being

Health professionals might be concerned that promoting walking for pleasure will lead people to walk too slowly to achieve health benefits. However, when people are asked to self-regulate their walking pace based on maintaining positive feelings they select intensities that approach the ventilatory threshold.<sup>18</sup> Thus, research suggests that walking for pleasure can lead to improvements in physiologic fitness and health.

Furthermore, the concept of participating in a behavior with the primary goal of hedonic "pleasure" can have negative connotations to some because they associated it with selfishness, a lack of self-control, and an unwise disregard for future outcomes like drug addiction. Yet, hedonic experiences may actually be health promoting because they are associated with decreased stress and depression and increased well-being.<sup>19</sup> Hedonic pursuits also have a revitalization function<sup>19</sup> and thus help fuel people to pursue their most meaningful goals (eudemonia).

Prescribing walking for pleasure as a specific strategy to fuel daily functioning and performance reframes it from a competing goal into an autonomous facilitator of what matters most. This new purpose for walking gives people permission to carve out time for revitalization and self-care.<sup>12</sup> But it also transforms walking into a meaning-making behavior.<sup>4</sup> In fact, this strategy is called "goal facilitation" and helps people sustain their health-related pursuits amid their other competing goals.<sup>17</sup>

Given that hedonic and eudemonic activities distinctly contribute to well-being, branding walking as a way to simultaneously pursue hedonic and eudemonic goals converts walking into a powerful reward and personally meaningful act.<sup>19</sup> This is important for sustainable self-regulation because striving toward autonomous

goals that reflect people's most cherished parts of life optimizes continued behavioral pursuit, indirectly, through improved coping strategies.<sup>20</sup>

### Conclusions

The traditional prescription over the last 30 years emphasizing medical, health-related benefits as the primary purpose for physical movement has not persuaded most people to adopt physically active lifestyles. A prescription to exercise to optimize health, regardless of how it makes people feel, might seem like good medicine. However, if the vast majority is not motivated to comply, then both individual and public health benefits will be small.

In this new era of health care, patient self-management decisions and motivation are paramount to improving outcomes and decreasing costs. Individuals are at risk of self-management failure because of numerous distractions and alternative choices that are a constant part of their busy daily lives. Research is mounting in favor of replacing the traditional biomedical-based convention for promoting physical activity with new messaging based on science relevant to sustainable behavior.

Our suggestion to promote walking as a way to experience subjective pleasure and meaning is inherently patient-centered and also follows recommendations from a systematic review<sup>21</sup> suggesting that physical activity messages be gain-framed and tailored to the individual. Yet, translating this evidence into belief systems, practice, and policies will take time and tenacity because it challenges a widely accepted convention about "the right way" to be physically active.

Although messaging should target the specific language and "hooks" appropriate for distinct demographics such as gender and ethnicity, this new communication strategy repositions walking as something that feels good but also moves us toward what matters most, in autonomous ways. By re-socializing people to notice the immediate positive payoffs of walking and how these rewards further boost their performance in their most cherished roles, health professionals can help walking become more relevant and compelling and better facilitate the consistent decision making, motivation, and self-regulation that underlie behavioral sustainability and better health.

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