

# Do we need to reconsider best practice in goal setting for physical activity promotion?

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Goal setting is one of the most widely applied and universally accepted strategies used to increase physical activity (PA). Goals are defined as internal representations of desired outcomes, events or processes,<sup>1</sup> such as losing 10 kg (outcome), completing a marathon (event) or being more active (process). Goal setting is particularly relevant for individual-level interventions, for example, when set by practitioners/clinicians prescribing exercise or making referrals. Indeed, the current trend of self-monitoring using wearables (Fitbit-like devices) is essentially rooted in achieving PA change through goal setting. Given recent calls for a ‘*movement for movement*’<sup>2</sup> in response to a burgeoning evidence base regarding the importance of PA prescription and counselling,<sup>3</sup> ensuring that the right goals are established, for the right person, and at the right time has clear implications for the effectiveness of interventions targeting both clinical and non-clinical populations. Furthermore, given that the greatest potential public health impact of PA promotion lies in assisting physically inactive individuals engage in *some* PA, as opposed to increasing the volume of PA among those who are already physically active,<sup>4</sup> ensuring our approach to PA goal setting is individualised and based on current evidence is of high significance.

In line with goal-setting theory,<sup>5</sup> best practice is considered to be specific, challenging goals. For example, the American College of Sports Medicine (ACSM) Guidelines for Exercise Testing and Prescription recommends the commonly used specific, measurable, achievable, realistic, time-bound, self-determined (SMARTS) acronym.<sup>6</sup> However,

theory and research suggests that setting specific, challenging goals (ie, current best practice) may be problematic for inactive populations, prompting the questions: ‘Are we setting the right goals for PA promotion?’ and ‘Do we need to rethink our approach to goal setting in order to maximise engagement in PA?’

A recent systematic review and meta-analysis<sup>7</sup> found that while both were beneficial, specific goals were no more effective at increasing PA than goals that were vaguely defined (eg, ‘to be more active’). Despite the common assumption that specific goals

are superior to vague ones,<sup>7</sup> Locke and Latham’s goal-setting theory<sup>5</sup> states that ‘trying for specific, challenging goals may actually hurt performance in certain circumstances... (such as) during the early stages of learning a new, complex task’ (p. 229). Specific, challenging goals can require greater attentional demands, create work overload, induce focus on immediate performance outcomes, divert necessary attention away from strategy development and inhibit learning.<sup>8</sup> Therefore, if learning how to be physically active is considered a complex task, then goal setting *theory* and *evidence* suggests that specific goals should not be considered best practice (ie, most effective) for individuals at the early stages of learning to be active.

Complex tasks differ from simple tasks on three dimensions<sup>8</sup>: (1) the number of dimensions that must be attended to simultaneously (component complexity), (2) the sequencing of acts and coordination

**Table 1** Recommendations for reconsidering best practice in goal setting for physical activity promotion

Focus	Issue	Recommendation
Policy	1. Guidelines prescribed by the WHO and other health organisations focus on absolute PA levels and may be unrealistic for least active individuals	1. Consider messaging of guidelines appropriate for individuals across stages of learning to be physically active, such as being more active each day beyond one’s current PA level
	2. Current guidelines emphasise outcomes: quantitative PA levels and the message that ‘some is better than none’	2. Provide more emphasis and qualitative guidance on strategy development and the process of learning <i>how</i> to be active
	3. Other goal types are not recommended by leading organisations (eg, American College of Sports Medicine) despite evidence of being as effective as specific/SMARTS goals	3. Update goal setting guidelines to move away from ‘one size fits all’ message, include other goal types, and provide resources to enable practitioners to set various goal types effectively
Research	4. Research on effectiveness of goal types in complex tasks has been conducted in other domains, with little PA-specific evidence to date	4. Critically test effectiveness of goal types over various stages of PA adoption to empirically determine best practice for specific populations (eg, levels of PA, clinical vs non-clinical)
	5. ‘Vague’ goals reported to be as effective as specific goals, <sup>7</sup> without a clear framework or explanation of mechanisms	5. Examine and better understand the nature, effectiveness and application of non-specific/‘vague’ goals in PA adoption
	6. Extensive research focuses on PA as a primary outcome of goal setting, with less attention on effects of goals on psychological processes influencing sustained PA	6. Experimentally test effectiveness of goal types on psychological factors influencing long-term engagement (eg, enjoyment, affect, confidence, motivation) as well as PA
	7. Common research designs aggregate data and tend to measure mean changes of a group/study condition rather than individual responses	7. Also employ innovative and diverse research designs (eg, N-of-1 methods <sup>9</sup> ) to better understand how to set the right goal, at the right time, for the right person
Practice	8. Guidance to practitioners is that specific/SMARTS goals are best practice in a ‘one size fits all’ manner	8. Consider whether individuals are at the early stages of learning to be physically active before prescribing specific/SMARTS goals
	9. Other goal types are not recommended or emphasised as much as specific/SMARTS goals despite being equally as effective	9. Work with physically inactive individuals to set additional goal types (eg, process, do your best, or open goals such as ‘see how active you can be’)
	10. Goal setting and behaviour change are complex, dynamic processes	10. Provide resources to manage complexity of long-term PA adoption, such as planning for setbacks, goal adjustment, and working towards habit formulation

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required among acts to accomplish the task (coordinating complexity) and (3) the need to adjust to change which can lead to outcomes such as uncertainty and anxiety (dynamic complexity). Learning to become physically active requires attention to a range of components such as frequency, intensity, duration, mode and cost of PA (ie, high component complexity). Sequencing and coordination are required to be physically active, such as scheduling, organising and prioritising (ie, high coordinating complexity). Individuals need to adjust to the changes involved in becoming, and staying, physically active, for example, with commitment, motivation and overcoming setbacks/relapses (ie, high dynamic complexity). From this perspective, the process of becoming physically active can arguably be considered a 'complex task', meaning that there is a need to reconsider specific, challenging goals as best practice for individuals at the early stages of learning to be active.

This issue suggests an oversimplification or misunderstanding in the application of goal-setting theory and implies something has been lost in translation from theory to practice. Further, questions can be raised over the recommendation of specific, challenging goals as current best practice advocated by leading organisations (eg, ACSM).<sup>6</sup> Similarly, promotion of the World Health Organisation's (WHO) guidelines for PA centres on specific targets for PA per week, which are problematic from a goal-setting perspective (eg, if individuals adopt these targets as goals). Indeed,

weekly goals—a primary focus of the WHO guidelines—do not have a significant effect on PA, whereas daily goals and daily-plus-weekly goals do.<sup>7</sup> Such recommendations may also act as a deterrent for physically inactive people who may incorrectly believe that benefits from PA are only obtained once this (in many clinical cases, unrealistic) threshold is achieved. Therefore, it is important for researchers, practitioners and policymakers to rethink and move beyond commonly held assumptions in goal setting and to adopt a critical perspective regarding the type of goals that should be set for individuals to maximise engagement in PA (see [table 1](#)). By doing so, it may be possible to achieve greater engagement in PA, on a larger scale and over a longer term, simply by changing how goals are phrased.

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**Acknowledgements** The authors would like to thank three anonymous reviewers and the Associate Editor for their feedback and suggestions on an earlier version of this submission.

**Contributors** Both authors contributed to writing, editing and preparing this submission.

**Funding** Simon Rosenbaum is funded by an NHMRC Early Career Fellowship (APP1098518)

**Competing interests** None declared.

**Ethics approval** This submission did not require Ethics Committee/Institutional Review Board approval.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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**To cite** Swann C, Rosenbaum S. *Br J Sports Med* Published Online First: [please include Day Month Year]. doi:10.1136/bjsports-2017-098186

Accepted 31 August 2017

*Br J Sports Med* 2017;**0**:1–2.  
doi:10.1136/bjsports-2017-098186

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