

Health goals among American adults: Prevalence, characteristics, and barriers

Journal of Health Psychology I-6 © The Author(s) 2016 Reprints and permissions: sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/1359105316656227 hpq.sagepub.com



Marina Milyavskaya¹ and Daniel Nadolny²

Abstract

Although numerous factors have been demonstrated in laboratory settings to lead to more successful health goal attainment, their actual use in daily goal pursuit is unknown. This study examines spontaneously reported health goals and their characteristics in a sample of 557 American adults. Participants responded to questions about health and health goals, with items assessing motivation, social support, and implementation intentions. In all, 66 percent of respondents had a health goal, 26 percent of participants had implementation intentions, and 47 percent received support from close others. Results suggest that interventions should focus on encouraging goal setting, teaching implementation intentions, and educating close others in providing support.

Keywords

barriers, goal pursuit, health goals, motivation, support

Preventable health issues are a growing concern throughout the world. Nowhere is this more true than in the United States, where roughly 1.2 million Americans die a year due to preventable causes (Danaei et al., 2009) such as smoking, overeating, and leading a sedentary lifestyle.

One way that people attempt to change their behavior is by setting goals (Webb and Sheeran, 2006). Research on New Year's resolutions has shown that people do set health-related goals, such as quitting smoking and losing weight; however, 25 percent of people abandon their resolution in the first week, and only 40 percent are still pursuing their goals 6 months later (Norcross and Vangarelli, 1989). Fortunately, research has identified many factors that increase the likelihood of goal success. This includes setting goals that are specific, measurable, and optimally challenging (Locke and Latham, 2002, 2013), and

autonomous rather than controlled (Sheldon and Elliot, 1999; Werner et al., 2016). Specifically, goals that are set and pursued because of personal interest or importance (termed autonomous or self-concordant; for example, a goal of running a marathon because of the enjoyment it will bring) are more likely to be attained than goals pursued to please others or attain an external outcome, or goals accompanied by introjects (termed controlled; for example, a goal of losing weight to please your spouse, or solely because your doctor

¹Carleton University, Canada ²Memorial University–Grenfell Campus, Canada

Corresponding author:

Marina Milyavskaya, Department of Psychology, Carleton University, 1125 Colonel By Drive, Ottawa, ON K1S 5B6, Canada.

Email: marina.milyavskaya@carleton.ca

told you to). Setting specific, concrete action plans for initiating goal pursuit and persisting when faced with obstacles (termed implementation intentions; Gollwitzer, 1999; Gollwitzer and Sheeran, 2006) have also been shown to aid in goal pursuit. Furthermore, research consistently shows that people are more likely to succeed at their goals when they have a close supportive other, including a greater likelihood of enacting healthy behaviors and achieving health goals (e.g. weight loss, smoking cessation) when partners and healthcare providers are supportive of the person's autonomy rather than controlling or directive (e.g. Koestner et al., 2012). Additionally, selfefficacy, defined as a sense of confidence in one's ability to accomplish the goal, is another predictor of successful goal pursuit (Bandura, 1997, 2013).

These studies, though important, are typically restricted to the laboratory, or explicitly instruct participants to set goals. Additionally, they are typically composed of either student or clinical samples. The lack of studies examining health goals in the general population leaves many questions unanswered. At what rates do people actually set health goals as a means to improve their health? When people do set goals, to what extent are they setting "good" goals—goals that possess the properties previously shown to be conducive to successful goal pursuit? And why do some people not set health goals for themselves? This study examines the characteristics of the health goals spontaneously reported by participants, including goal content, implementation intentions, motivation, and support from others. People's reasons for not setting health goals are also examined. To our knowledge, no other published study has examined these characteristics of health goals in the general population. An understanding of people's goal-setting strategies, particularly those used least often, can provide likely targets for future health interventions. As this study is exploratory in nature, the aim is not to test specific hypotheses but rather to describe people's goal setting and use of goal-pursuit strategies.

Method

Participants and procedure

Participants were recruited for a brief (median completion time=4.2 minutes) online study on Health through Amazon Mechanical Turk (Mturk). MTurk is an online platform that links researchers with "workers" who complete surveys for a small compensation (in our case, US\$.25; see Buhrmester et al., 2011 for a description of Mturk, the incentive structure. and the reasons why people complete psychology surveys on the platform). MTurk participants have been shown to be more representative of the American public than standard Internet, student, or traditional convenience samples, and results of studies conducted on MTurk are consistent with traditionally conducted studies (Buhrmester et al., 2011). For this study, the description read "10-minute survey - Complete some questionnaires about your health and goals." In all, 567 participants from the United States were recruited on Mturk in August 2012; eight participants who completed the survey in under a minute and two who reported their age as under 18 years were excluded. Of the remaining 557 participants, 41.5 percent were females (three participants did not report gender), and the mean age was 29.4 (standard deviation (SD) = 11.17, range = 18–70) years. The study was approved by the lead author's university research ethics board, and all participants provided informed consent.

Measures

Participants first reported on their current health using 1 item: "In general, how would you rate your overall health now?" with five possible responses ranging from "excellent" to "poor." They then indicated their height and weight, which was used to compute their body mass index (BMI). They were then asked whether they were currently pursuing a health goal. Participants who did not have a health goal were asked to rate their agreement on a 7-point scale from "strongly disagree" to "strongly agree" with seven reasons for not setting a health goals (see Figure 1).

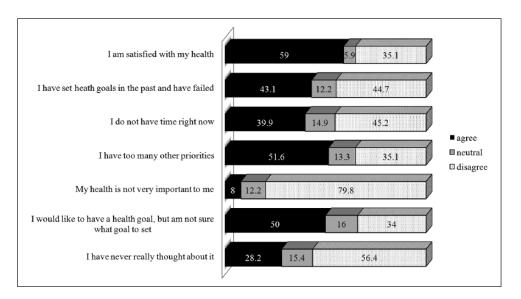


Figure 1. Reasons for not setting a goal and proportion of agreement (including "strongly agree," "agree," and "some

what agree"), neutral responses ("neither agree nor disagree"), and disagreement (including "strongly disagree," "disagree," and "somewhat disagree").

Participants pursuing a health goal described the goal, as well as the following goal properties: the length of time they had been pursuing the goal, whether the goal was time-limited ("Do you have a specific time frame for your goal?"), their use of implementation intentions ("Did you make specific plans for when, where, and how you will reach your goals?"), the number of times they had set this goal or similar goals for themselves in the past, and their self-efficacy ("On a scale of 1-10, to what extent do you feel like you have the skills and resources necessary to succeed at this goal?"). Each goal was coded by a trained research assistant as being a weightrelated (e.g. lose 20lbs) or non-weight-related goal (e.g. to run every day).

Goal motivation. Motivations for pursuing the goal was assessed using five items representing a continuum of motivation ranging from intrinsic ("Because of the fun and enjoyment which the goal will provide you—the primary reason is simply your interest in the experience itself."), to extrinsic ("Because somebody else wants you to, or because you'll get something from somebody if you do.") motivations (see Koestner et al., 2012

for all items). A combined score of relative autonomy was computed by subtracting the mean of the scores on the items representing controlled motivation from the mean score of autonomous motivation, such that positive values represented a relatively more autonomous motivation.

Support. Participants were asked whether someone was supporting their goal, and who this person was. If they were receiving support, they completed a brief scale examining three major types of support (adapted from Koestner et al., 2012). Five items assessed autonomy support (e.g. "This person listens to what I would like to do regarding my goals."), three items assessed directive support (e.g. "This person repeatedly reminds me of my goals."), and two items tapped into controlling behaviors (e.g. "This person criticizes how I pursue my goals").

Statistical analyses

Descriptive data are presenting using proportions and means. Comparisons between men and women are conducted using chi-square tests and one-way analyses of variance (ANOVAs).

F(1, 172) = 4.08, d = .31

F(1, 172) = 6.18, d = .38

F(1, 172) = 3.78, d = .30

Goal characteristic	Overall (%)	Men (%)	Women (%)	Gender difference
Pursuing health goal	66.2%	63.9%	69.6%	$\chi^2 = 1.94, \phi = .05$
Among those pursuing healt	h goal			
Weight-related goal	57.8%	56.5%	59.4%	$\chi^2 = .30, \phi = .03$
Time delimited	22.3%	25.6%	18.1%	$\chi^2 = 2.91, \phi = .09$
Previously attempted	42.8%	38.6%	48.1%	$\chi^2 = 3.31, \ \phi = .09$
Implementation intentions				$\chi^2 = 1.62, V = .05$
Yes	25.9%	28%	23.1%	
Somewhat	22.1%	22.7%	21.3%	
No	52%	49.3%	55.6%	
Receive support	47.1%	39.6%	56.9%	$\chi^2 = 10.79, \phi = .17$
	M (SD)	M (SD)	M (SD)	
Length of pursuit (months)	19.91 (36.48)	18.55 (38.54)	21.66 (33.67)	F(1, 366) = .65, d = .08
Motivation (overall)	2.12 (1.89)	2.17 (1.83)	2.06 (1.96)	F(1, 366) = .28, d = .05
Self-efficacy	7.74 (2.17)	7.94 (2.05)	7.49 (2.29)	F(1, 364) = 3.84, d = .21

4.02 (.62)

3.28 (.88)

2.52(.99)

Table 1. Characteristics of health goals, including differences among men and women.

SD: standard deviation.

Type of support Autonomy

Directive

Controlling

Values in bold are significant at p < .05, and values in italics are significant at p < .10.

4.13 (.64)

3.41 (.84)

2.32 (1.01)

Results

In all, 66% of respondents reported having a health goal. Men and women were equally likely to set a health goal, $\chi^2(1, N=554)=1.94$, p=.16, $\phi=.06$). There were no age or reported health differences between those who did and did not set a health goal; however, those who had a health goal had a higher BMI (M=26.15) than those who did not (M=24.84), F(1,540)=5.65, p<.05, d=.20.

Goal-setters

Table 1 reports the properties of the goals among all participants who had set a health goal, as well as the results for women and men separately. In all, 58% of the goals were related to weight. The average length of time people have been pursuing their goal was 20 months, and 43 percent reported that they have set this goal or a similar goal for themselves before. Specific implementation intentions were set in 26 percent of the cases, with a further 22 percent

reporting that they made vague plans. However, just over 50 percent of participants did not have any plans for achieving their goal; this proportion was similar in men and women. Participants reported pursuing their goals for primarily autonomous reasons (M=2.12), with only 14 percent of respondents reporting that their goal was relatively more controlled than autonomous.

4.22(.65)

3.53 (.79)

2.14 (1.00)

Overall, approximately half of all participants had someone who was supporting them in their goal. However, this proportion was significantly higher in women (57%) than in men (40%), $\chi^2(1, N=367)=10.79$, p<.001, $\phi=.17$. The most common support person was one's partner (65.3%), followed by family (17.4%) and friends (9%). Women were significantly more likely than men to rely on family (25% vs 8.9%, $\chi^2(4, N=167)=11.58$, p<.05, V=.15). People reported their support figures to be more autonomy-supportive (M=4.13) than directive (M=3.41; t(174)=11.18; p<.001) or controlling (M=2.32; t(174)=17.86; p<.001); this pattern was seen for both men and women. Men

reported their support person to be less autonomy-supportive (M=4.02) and more controlling (M=2.52) than women (M=4.22 and M=2.14 for autonomy supportive and controlling, respectively). People with a weight goal were more likely to have someone supporting them than those whose goal was not weight-related (64.4% vs 35.6%, $\chi^2(1, N$ =369)=5.96, p<.05, ϕ =.13). Additionally, those with a supportive other had a higher BMI (M=27.39 vs 25.04 for participants not receiving support, F(1, 356)=13.90, p<.001, d=.40), suggesting perhaps that visible issues receive more support than invisible ones.

Goal non-setters

Figure 1 shows the proportion of participants who did not have a health goal (n=188) who agreed with the presented reasons for not setting a goal. As can be seen, the most commonly endorsed reasons were being satisfied with one's health, having too many other priorities, and not being sure what goal to set. Additionally, a substantial minority of participants reported that they never really thought about setting a goal. There were no gender differences in the endorsement of these reasons except that women were much less likely than men to report that they never thought about setting a health goal (49.6% men vs 67.1% women disagreed with the statement, $\chi^2(2, N$ =187)=6.53, p<.05, V=.13).

Discussion

This research investigates how people in the general population set and pursue health goals. Results show that approximately 66 percent of people set health goals, and that this is similar in men and women. Additionally, people with a higher BMI, who could presumably greatly benefit from changing their health habits, are more likely to set goals. This is good news, as setting a goal suggests that these people are either in the preparation or action stage when it comes to changing their health (Prochaska, 2013; Prochaska and Velicer, 1997).

Examining the characteristics of people's naturally set goals establishes the prevalence of setting goals that are, according to research, more likely to result in successful goal attainment. For example, while setting implementation intentions has consistently been shown to improve goal pursuit (Gollwitzer and Sheeran, 2006), our research found that only approximately a quarter of participants set specific plans on how to pursue their goals. Additionally, we found that less than 50 percent of participants received support from close others; this was especially the case for men, who were less likely than women to receive support. On the positive side, when it came to motivation and self-efficacy, participants in our study reported predominantly autonomous goals, and reported feeling that they had the ability to accomplish their goal.

In this study, approximately one-third of participants reported not having a health goal. Since setting a health goal is an effective way of actually changing one's behaviors (Webb and Sheeran, 2006), understanding people's reasons for not setting a health goal could help develop interventions designed to encourage people to set goals and thus change their behaviors. Interestingly, 35 percent of our participants reported not setting a health goal despite being unsatisfied with their health, and 28 percent have never thought about setting a health goal. This presents one direction for future interventions—namely, encouraging people (especially those who are dissatisfied with their health) to set health-related goals. Perhaps more importantly, half the participants in the study reported that they would like to set a health goal but were unsure of what goal to set. This suggests that one fruitful intervention to improve health-related behaviors could consist of providing guidance regarding useful health goals to set.

Limitations

The main limitation of this study is its use of an Internet sample rather than a representative sample of the American population. Additionally, it was impossible to ascertain how representative (or unrepresentative) the sample actually was because data on ethnicity and location were not collected (although participation was restricted to

those located in the United States). Furthermore, the study was based entirely on self-report, which is susceptible to presentation bias and could have skewed some measures (e.g. BMI).

Conclusion

This study represents a first attempt at understanding the setting and pursuit of self-chosen health goals in American adults. A clearer picture of the characteristics of the goals people set and the reasons why some people do not set goals can help guide future interventions. Based on the present findings, some especially fruitful areas of intervention could be to encourage people who are unsatisfied with their health to set health goals, helping people choose appropriate goals (that are autonomous, optimally challenging, measurable, specific, etc.), as well as setting implementation intentions for these goals. One other potentially useful intervention could be in educating close others, including spouses, friends, and family members, in providing appropriate (autonomy-supportive) support for health goals.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Bandura A (1997) Self-Efficacy: The Exercise of Control. New York: Freeman & Co.
- Bandura A (2013) The role of self-efficacy in goal-based motivation. In: Locke EA and Latham G (eds) *New Developments in Goal Setting and Task Performance*. New York: Routledge, pp. 147–157.
- Buhrmester M, Kwang T and Gosling SD (2011) Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science* 6(1): 3–5.

- Danaei G, Ding EL, Mozaffarian D, et al. (2009)
 The preventable causes of death in the United
 States: Comparative risk assessment of dietary,
 lifestyle, and metabolic risk factors. *PLoS Medicine* 6(4): e1000058.
- Gollwitzer PM (1999) Implementation intentions: Strong effects of simple plans. *American Psychologist* 54: 493–503.
- Gollwitzer PM and Sheeran P (2006) Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in Experimental Social Psychology* 38: 69–119.
- Koestner R, Powers TA, Carbonneau N, et al. (2012) Distinguishing autonomous and directive forms of goal support their effects on goal progress, relationship quality, and subjective well-being. Personality and Social Psychology Bulletin 38(12): 1609–1620.
- Locke EA and Latham GP (2002) Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist* 57(9): 705.
- Locke E and Latham G (2013) Goal setting theory: The current state. In: Locke EA and Latham G (eds) *New Developments in Goal Setting and Task Performance*. New York: Routledge, pp. 623–630.
- Norcross JC and Vangarelli DJ (1989) The resolution solution: Longitudinal examination of New Year's change attempts. *Journal of Substance Abuse* 1(2): 127–134.
- Prochaska JO (2013) Transtheoretical model of behavior change. In: Gellman MG and Turner JR (eds) *Encyclopedia of Behavioral Medicine*. New York: Springer, pp. 1997–2000.
- Prochaska JO and Velicer WF (1997) The transtheoretical model of health behavior change.

 *American Journal of Health Promotion 12(1): 38–48.
- Sheldon KM and Elliot AJ (1999) Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology* 76: 482.
- Webb TL and Sheeran P (2006) Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin* 132(2): 249.
- Werner KM, Milyavskaya M, Foxen-Craft E, et al. (2016) Some goals just feel easier: Selfconcordance leads to goal progress through subjective ease, not effort. *Personality and Individual Differences* 96: 237–242.