

ORIGINAL RESEARCH REPORT

Frozen Goals: Identifying and Defining a New Type of Goal

Mariya Davydenko, Kaitlyn M. Werner and Marina Milyavskaya

Goals pursuit involves multiple stages from setting the goal to actively pursuing the goal to finally achieving or abandoning the goal. Sometimes, however, individuals may set a goal and take some steps towards achieving it, but after some time they are neither actively working to achieve the goal nor abandon the goal. We describe such goals as 'frozen goals': personally important goals that individuals remain committed to (and so are not abandoned), yet no steps are actively taken towards attaining the goal. Across three studies we demonstrate the prevalence of frozen goals (Study 1) and examine differences between frozen goals and current goals that are actively pursued (Study 2) and between current frozen goals and past frozen goals (Study 3). In Study 1 we find that 92% of the sample reported having at least one frozen goal in their life, thereby demonstrating that frozen goals are not attributable to individual differences. In Study 2, we found that participants randomly assigned to describe a frozen goal reported making less progress, were less committed to, and considered the frozen goals less important than current goals. However, frozen goal commitment and importance was significantly greater than the scale midpoint, suggesting that frozen goals are nonetheless important. Across the studies, we found that frozen goals are common and are maintained for many years with very little progress, but that shifts from frozen to active or abandoned goals are possible. This research opens many avenues for new questions and new perspectives on goal pursuit and goal setting.

Keywords: goal pursuit; motivation; autonomy; self regulation; goal progress

Think about a goal that you have been wanting to achieve yet despite your best intentions remains stagnant. This goal may be something that you have started several times but have struggled to maintain. Or perhaps it is something that you have always wanted, but do not have the time to pursue it or simply do not know where to start. Despite the lack of progress or actual pursuit, you might still classify this as a current goal. For example, Mary wants to learn Spanish. Despite buying several books and video programs to aid her in pursuing this goal, these books sit on the shelf gathering dust, and she has yet to learn the language in several years. However, when asked about her goals, Mary will still mention learning Spanish. Throughout goal pursuit, numerous obstacles and challenges may delay progress and achievement of a goal. Some goals may fall by the wayside and be replaced by new, more appropriate, or more urgent or time-relevant goals. But what about goals that are set but not actively pursued, yet are still maintained as a goal? This research examines such goals that are neither abandoned nor actively pursued but are nonetheless considered a goal. Such goals we call "frozen" goals. These frozen goals are set by individuals with the

intention that one day the goal will be attained, but no significant progress is made over a long period of time. We propose that frozen goals are distinct from the type of goals that are typically examined in goal pursuit research, and we examine differences among active goals and frozen goals.

What is a "Frozen" Goal?

For the purpose of the present research, we define a goal as a "cognitive representation of a desired end state that a person is committed to attain" (Milyavskaya & Werner, 2018, p. 1). Using this definition, goals can be distinguished from fantasies – mental representations of future events that may or may not actually occur – that are not dependent on attainment (Oettingen, Pak, & Schnetter, 2001). Unlike fantasies, goals require commitment to purposeful action with the likelihood that the desired end state will be attained (Elliot & Fryer, 2008). The commitment dimension is vital in the recognition of frozen goals, as we anticipate that individuals maintain commitment to achieving their frozen goals, thereby distinguishing such goals from fantasies. Frozen goals also differ from irrevocable goals – unattainable goals one refuses to give up (Miceli, & Castelfranchi, 2017). Instead, frozen goals are attainable goals and we predict that individuals believe they will attain the goal, even if they have made little progress thus far. Therefore, we define

frozen goals as cognitive representations of desired end states that one maintains high commitment to achieving and that are achievable but are not actively pursued.

Frozen Goal Characteristics

To further differentiate between personal goals and frozen goals, it is important to delineate the characteristics associated with frozen goals. Drawing from various theories of goal pursuit, we first describe the characteristics that we expect frozen goals to possess, including how difficult and/or specific a goal is, the underlying reasons (or motivation) for why a goal is pursued, and the specific plans an individual makes to achieve their goal.

Difficulty and specificity. Goal Setting Theory (Locke & Latham, 2006) suggests that goals should be difficult in order to maximize task performance and persistence. Specifically, these researchers suggest that there is a positive linear relationship between goal difficulty and task performance, such that the more difficult the goal is, the better the performance. However, more recent research suggests that goals that are too challenging may stifle effort (Bayuk, 2015; Ordóñez, Schweitzer, Galinsky, & Bazerman, 2009), as well as lead to decreased self-efficacy and commitment (Bandura, 1977). Essentially, the level of goal difficulty needs to inspire and not inhibit effort and progress.

In addition to difficulty, construal level can also influence how much effort gets exerted during goal pursuit. Concrete, lower-order goals are specific and have defined details of when and how the individual will achieve the goal (e.g., I will go to the gym three times a week), while abstract, higher-order, goals are non-specific and are vaguely defined (e.g., I will be healthy) (Emmons, 1992). Abstract goals are not temporally constrained and often require indefinite maintenance, while concrete goals are not limited to proximal goals and can be set for short- and long-term achievement (Emmons, 1992; Street, 2002). Concrete goals motivate greater performance and help individuals focus their attention on the goal as compared with abstract goals (Ordóñez et al., 2009; Seijts, Latham, Tasa, & Latham, 2004).

In the context of frozen goals, the research on goal difficulty and goal specificity outlined above suggests that frozen goals may be goals that are too easy and/or vague, and therefore are not actively pursued in a meaningful way (i.e., they put in less effort during goal pursuit). However, we further propose that any goal can become “frozen,” whether easy or difficult, concrete or abstract. Individuals may overlook easier frozen goals because they are less satisfying to achieve (e.g., cleaning out the basement), as well as difficult frozen goals if they perceive it to be too overwhelming (e.g., writing a book). Similarly, individuals may maintain, for example, a frozen goal of working out regularly (concrete), while others maintain a frozen goal of being a healthy person (abstract). We propose that frozen goals are a separate category of goals entirely and would not be classified exclusively as an abstract or concrete goal.

Motivation. The reasons why an individual selects a goal also has important implications for goal pursuit, especially in the context of frozen goals. In a general sense, people may pursue goals out of personal interest or because it connects to their broader life values – it is

something that they genuinely *want to do* – or because they feel pressured by others or wish to attain external rewards – it is something that they feel like they *have to do* (Milyavskaya, Inzlicht, Hope, & Koestner, 2015; Ryan & Deci, 2000). An extensive body of research finds that pursuing goals for more want-to reasons leads to greater goal progress, whereas pursuing goals for have-to reasons is unrelated to goal progress (Koestner, Otis, Powers, Pelletier, & Gagnon, 2008; Milyavskaya et al., 2015). Additionally, more recent research finds people make more progress on want-to goals because they experience fewer obstacles during goal pursuit (Milyavskaya et al., 2015) and report feeling of greater subjective ease (Werner, Milyavskaya, Foxen-Craft, & Koestner, 2016). The distinction between want-to and have-to motivation seems especially relevant in the context of frozen goals, as it would be reasonable to infer that have-to goals are especially susceptible to becoming frozen due to lack of personal interest and self-regulatory strategies that could help them succeed (e.g., plans). Even more poignant is the perception of obstacles and subjective ease – by perceiving more obstacles and greater difficulty (even if objectively it is the same level of difficulty as other goals), the actual pursuit of these goals may be forestalled.

Planning. Once a goal is set, it is important to then develop a plan to facilitate successful goal striving. Implementation intentions, or “if-then” plans, involve specifying when, where, and how one will go about pursuing the goal (e.g., plan of action, strategy), as well help the individual consider how he/she will face obstacles when pursuing their goal (Gollwitzer & Brandstätter, 1997). For example, Tom is pursuing the goal to lose 10 pounds, but also knows that his colleagues often invite him to the cafeteria for lunch, which has the potential to conflict with his goal. Instead of avoiding the social lunches, he sets the implementation that if his colleagues ask him out to lunch, then he will bring his pre-packed lunch and avoid going through the checkout line. Making such plans allows an individual to prepare by mentally testing multiple courses of action (e.g., Tom planning to bring his lunch), as well as define the temporal boundaries of the goal, such as start and end date (Elliot & Fryer, 2008). Importantly, having pre-determined plans means that an individual does not need to waste time making decisions or contemplating goal-incongruent options because they have already made these decisions in advance, therefore automatizing their behaviour and increasing the likelihood of making greater progress on one’s goals (Gollwitzer & Brandstätter, 1997; Gollwitzer & Sheeran, 2006; Webb & Sheeran, 2007).

While the use implementation intentions has shown to be an effective self-regulatory strategy during goal pursuit, there is an abundance of evidence to suggest that people actually do not know how to formulate these plans in an efficient or effective way (de Vet, Oenema, & Brug, 2011; Milyavskaya & Nadolny, in press). In a recent study on health goals, over 50% of people reported that they did not have any plans, while only 26% reported having more concrete plans (Milyavskaya & Nadolny, in press). Furthermore, even when people are specifically asked to develop implementation intentions, research indicates that

nearly a third of participants generated implementation intentions incorrectly (de Vet et al., 2011). These findings can shed light on the setting of frozen goals, as it may be the case that people know what it is that they want to pursue, however, they do not have the skills or resources to develop the right plans to help them effectively pursuit it.

Goal Disengagement

Although individuals set and pursue goals, this does not guarantee that all goals are or can be achieved. It is sometimes necessary to abandon or disengage from a goal, especially when the goal is unattainable. Goal disengagement consists of two factors: reducing effort and relinquishing commitment (Wrosch, Scheier, Carver, & Schulz, 2003). By disengaging from goals, one may preserve resources (e.g., time and money) and re-direct them towards other important goals (Wrosch, Scheier, Miller, Schulz, & Carver, 2003b). While it may seem counterintuitive, research finds that goal disengagement can be positive, as people report experiencing greater subjective well-being, less intrusive thoughts, less stress, and avoid potential failure (Wrosch et al., 2003b). Although disengagement is associated with the stigma of ‘giving up’ or being a ‘quitter’, in certain situations it can serve an adaptive function as it makes more resources available for pursuing other goals (Wrosch et al., 2003). Conversely, the inability to disengage from an impossible goal is associated with increased depression (Nolen-Hoeksema, Parker, & Larson, 1994), rumination (van Randenborgh, Hüffmeier, LeMoult, & Joormann, 2010), and decreased flexibility of goal pursuit strategies (Lench, & Levine, 2008).

By definition, frozen goals are not actively pursued, and so effort is reduced. However, the frozen goal is still maintained as an attainable goal, keeping commitment high. Frozen goals are not unattainable, and the same goals are actively pursued and achieved by many, such as losing weight or learning a new language. It then appears that frozen goals fall in between the two factors involved in goal disengagement, namely reduced effort and commitment, and this may explain why people do not relinquish a frozen goal. It is also interesting to consider what happens if frozen goals become unfrozen and individuals ultimately either achieve or abandon the once frozen goals. As this is a novel area of research, there are more questions than answers. However, it is important to determine whether frozen goals are maintained indefinitely without change.

Knowledge of past experiences with frozen goals (i.e., have you ever achieved or abandoned a frozen goal) can help in the description of current frozen goals. If frozen goals can be achieved or abandoned, then it is worth examining the factors that ‘melted’ the goal and provoked the change.

The Present Research

The purpose of this research is to determine the prevalence and characteristics of frozen goals. We propose that frozen goals are the kinds of tasks people set out to do (e.g., learning a new language), but with time these goals lose momentum. What is intriguing about these goals is that people do not give up on the idea of one day achieving this goal. It seems that “frozen” goals are valued enough to maintain commitment, but the individuals are not committed enough to actively pursue them. We thus propose that frozen goals are a different category of goals and begin to descriptively examine their characteristics and correlates.

As this is an entirely new perspective on goal research, the three studies presented in the present paper are predominantly exploratory in nature. We expect frozen goals to be different from active goals, but we are not predicting which aspects of the goals will differ. In a series of three studies, we examine frozen goals across various goal constructs. In the first study, we explore the prevalence of frozen goals by surveying how many people have such goals and determining the basic characteristics of frozen goals. The second study compares currently pursued ‘active’ goals and frozen goals to explore the distinctions between the two. Finally, the third study examines whether people have either abandoned or attained frozen goals in the past and compares those three types of goals (past frozen abandoned, past frozen achieved, and current frozen) to establish both prevalence of past frozen goals and explore their differences.

Recruitment and Reporting

In all studies we recruited Amazon’s Mechanical Turk (MTurk) workers. We determined sample sizes in advance of data analysis, using an informal rule of thumb (i.e., 100 per condition plus 20% to account for missing data). In each study, recruitment was limited to Canadian and American individuals, participants received \$0.25 as compensation, the measures were completed using Qualtrics, and the studies ranged from 10–15 minutes. **Table 1** shows sample details. The unabridged surveys

Table 1: Sample characteristics across studies.

Study	Recruited <i>N</i>	Participants excluded from analysis	Final <i>N</i>	Female (%)	Age in years <i>M</i> _{age} , <i>SD</i> _{age}
1	250	22	228	61.8	36.77, 12.93
2	257	33	224	62.9	36.5, 11.88
3	363	66	297	59.3	38.48, 13.11

Note: In each study, participants were excluded if they did not complete the survey (Study 1: *n* = 22, Study 2: *n* = 21, Study 3: *n* = 60). In Study 2, we excluded participants who were randomly assigned to the frozen goal condition but did not have a frozen goal (*n* = 12). In Study 3, we excluded participants who never had a frozen goal (*n* = 2), failed to follow the instructions (*n* = 3), or greater than ±3 standard deviations from the mean number of achieved goals (*n* = 1). Reported demographics information is based on the analyzed sample.

and data for all studies are available on the Open Science Framework (OSF; https://osf.io/u6fhz/?view_only=6eca8d6d686c44e5b6def194e5680700).¹ All data was collected prior to analysis. All manipulations, measures, and exclusions in the study are disclosed either in the main text or in the online supplemental materials. All studies were approved by an ethics board. All participants completed an informed consent prior to participating in the study and were debriefed upon completing the survey.

Study 1

The primary purpose of this exploratory study was to examine the prevalence of frozen goals – that is, do people have such goals, and are they common or rare? Along with prevalence, we wanted to learn about the characteristics of frozen goals, such as commitment, motivation, effort, importance, and difficulty.

Method

Procedure

Upon agreeing to participate, participants were presented with a description of what constitutes a frozen goal:

People sometimes have goals that they set for themselves repeatedly but do not take any concrete steps to complete. Do you have such a goal? This is a goal that you are not actively pursuing in the last few months and you have no specific plan on how to pursue the goal. For example, you may repeatedly set the goal to learn a new language, but after several years you have not achieved the goal or made significant progress yet continue to set the goal for yourself in the future. Or you tell yourself that you will start going to the gym ‘next week’ or ‘next month’, yet weeks and months go by and you still do not do it, although you maintain the goal of working out regularly. Such goals can be considered “frozen” in time because no steps are actively being taken towards attaining the goal, but you do not give up on the goal.

Those who indicated that they have such a goal continued onto a questionnaire asking about characteristics of their goal, whereas those who did not have a frozen goal were asked whether they had a frozen goal in the past. If so, they were asked to complete a questionnaire about the past frozen goal. Participants who did not have either a current or past frozen goal were asked to complete a questionnaire based on a goal that they were currently pursuing. Lastly, participants completed the Life Orientation Test² and reported their gender and age.

Measures

Goal categories. Using open-ended questions, participants were asked to describe what their goal is, why it is important to them, and why they are pursuing it. The goal descriptions were categorized according to the type of goal described (e.g., financial, health, hobby, etc.) to find whether certain types of goals were more likely to be frozen goals than others. Two independent coders rated

each description based on a list of goal domains taken from previous studies. The coders had excellent agreement ($ICC = .94$, 95% CI [.91, .95]) and any discrepancies were resolved by the lead author.

Goal characteristics. After describing their goal, participants reported how much **progress** they made towards completing the goal using a sliding timeline (0 = *No progress*, 100 = *Achieved*). Next, participants reported goal **importance** and **effort**. They rated on a Likert scale (1 = *Not at all*, 5 = *Very*) how important the goal was, how important achieving the goal was, and regardless of importance, how much effort was put into achieving this goal. Here we wanted to distinguish between the importance of simply having a goal and the importance of actually achieving the goal. Finally, participants rated on a Likert scale (1 = *Not at all*, 7 = *Very*) whether they felt they had the skills and resources to achieve the goal, how committed they felt towards the goal, how difficult it is to achieve the goal, and whether they **made specific plans** for how to achieve the goal. Three impartial coders rated the concreteness of participants’ goal descriptions using a Likert scale (1 = *Abstract* to 5 = *Concrete*). One of the three coders did not follow the instructions when coding the goal descriptions and the ratings were not included in the analysis. The remaining two coders had good agreement ($ICC = .73$, 95% CI [.64, .80]) so we averaged their ratings to create a measure of goal concreteness.

Goal motivation. Participants then rated their motivation for each goal using five items that each reflects a different type of motivation (Sheldon & Elliot, 1998). Using a Likert scale (1 = *Not at all*, 7 = *Very*), participants rated whether they were pursuing this goal because someday else wanted them to (extrinsic), because they would feel ashamed or guilty if they did not pursue it (introjected), because they believed it was an important goal to have (identified), because the experience of pursuing the goal is fun (intrinsic), and because it represented their identity and values (integrated). In previous research, identified, integrated, and intrinsic items represented want-to motivation, and extrinsic and introjected represented have-to motivation (e.g., Milyavskaya et al., 2015). Want-to motivation and have-to motivation was measured individually, as opposed to along one continuum, because one could experience both want-to and have-to motivation simultaneously while pursuing a goal (e.g., learning a language your grandparents speak because they want you to learn it and because you believe it is important to embrace your cultural roots).

Temporal characteristics. Several temporal characteristics of the goal were assessed. Participants first rated how long they had a frozen goal (1–6 months, 6–12 months, 1–2 years, 2–3 years, Over 3 years). Next, they reported when they planned to start working towards the goal and when they would like to have the goal achieved (*In less than a month*, *In the next month*, *In the next few months*, *In the next 6 months*, *In the next year*, *In more than a year*, *Don’t really know*). Finally, they rated how much time it would take to achieve the goal once they started (1 week, 1 month, 2–3 months, 6 months, 1 year, More than 1 year, *Don’t really know*).

Goal-identity congruence. Participants rated how important having the goal is to their identity now and how important achieving the goal would be to their identity in 10 years (adapted from the Inclusion of Other in the Self Scale by Aron, Aron, & Smollan, 1992). In a gradual progression, two circles (self and goal) approach each other and eventually overlap. Participants selected which set of circles best represented their relationship to the frozen goal.

Results

Preliminary analyses revealed that 92% of participants reported having a frozen goal at some point in their life, with 80% reporting a current frozen goal and 12% having experienced it sometime in the past. As presented in **Table 2**, people most frequently reported that health (37.4%) or career (15.9%) goals were most likely to be frozen. To statistically examine the characteristics of the frozen goals, we tested whether they differed from the midpoint of the scale.³ People indicated that these goals were important to both have, $t(181) = 19.18, p < .001, d = 2.85$, and to achieve, $t(181) = 22.52, p < .001, d = 3.35$, and that they were indeed committed to their pursuit, $t(181) = 11.01, p < .001, d = 1.64$. This is likely because people perceived these goals to be personally important, $t(181) = 17.02, p < .001, d = 2.53$, fun to pursue, $t(181) = 4.24, p < .001, d = 0.63$, and because they connect to their broader life values, $t(181) = 6.75, p < .001, d = 1.00$. Additionally, commitment can be further demonstrated by how long people have maintained these goals, as 50% of participants have held their goal for 2 years or more

(see **Table 4**). Interestingly, despite their reported lack of progress during this time, 63% indicated that they will start actively pursuing this goal within the next month. These findings, as well as more detailed characteristics of frozen goals can be found in **Tables 3** and **4**.

Brief Discussion

Study 1 demonstrates that most people currently have at least one frozen goal. Although comparisons with active goals were not possible in this study, we examined some basic characteristics of frozen goals. Frozen goals are low on progress, but high in importance; they are typically want-to (rather than have-to) goals. On average, individuals repeatedly set frozen goals for years, while maintaining that they will start actively pursuing the goal in the next month. These findings demonstrate the paradox of frozen goals (e.g., important and intrinsically motivated, but low progress) that cannot be entirely explained by the literature on motivation and goal setting, thus suggesting it is a unique type of goal that has not been previously studied.

Study 2

The purpose of the second study was to compare frozen and active goals. Although we had hoped to do this in the first study, the high prevalence of frozen goals meant that very few people had never had a frozen goal, with only 18 participants completing the ‘active’ goal questionnaire. Based on the high prevalence of frozen goals found in Study 1, in this second study we randomly assigned participants to report on a frozen or active goal;

Table 2: Percentage of reported goals by category for all studies.

Goal category	Goal examples	Study 1		Study 2		Study 3	
		Frozen (%)	Frozen (%)	Active (%)	Current frozen (%)	Achieved frozen (%)	Abandoned frozen (%)
Physical health	to lose weight, run 5 miles a day, to eat more fruit and vegetables	37.4	38.8	42.7	28.7	34.8	22.3
Financial	pay off debt, I would like to buy a house, making passive income online	12.6	10.2	23.4	11.6	8.7	7.4
Career	to get a promotion, completing my college degree, to start a business	15.9	19.4	16.1	20.2	26.1	28.7
Learn something new	learn to swim, cage diving with a great white shark, learn French	9.3	11.2	4.0	14.7	13.0	25.5
Home/car	clean car interior, develop the basement of my house, remodel my house	3.3	2.0	2.4	0.8	1.4	2.1
Hobby	to read more books, work more on my art work, get caught up on scrapbooking	11.5	11.2	2.4	10.1	1.4	7.4
Life change	to build a log cabin to live in for the rest of my life, to move out of parent’s house, get driver’s licence back	3.8	2.0	3.2	6.2	4.3	0
Relationship	to be a better mother, to get divorced, get ex-girlfriend back	3.8	2.0	3.2	2.3	2.9	3.2
Stop bad habit	give up smoking, snack less	2.2	2.0	2.4	3.9	7.2	2.1
Other	go to therapy, get OCD under control	0	1.0	0	1.6	0	1.1

Table 3: Frozen goal characteristics – Study 1.

	Minimum	Maximum	<i>M</i>	<i>SD</i>	Mean difference from midpoint
Progress	0	100	23.85	21.04	-26.15
Important to have goal	2	5	4.22	0.86	1.22
Important to achieve goal	2	5	4.32	0.79	1.32
Effort	1	5	3.03	1.21	0.03
Skills and resources	1	7	5.80	1.46	1.80
Goal commitment	1	7	5.19	1.46	1.19
Difficult to achieve	1	7	5.48	1.41	1.48
Specific plans	1	7	4.14	1.83	0.14
Extrinsic motivation	1	7	2.54	1.86	-1.46
Introjected motivation	1	7	3.68	2.08	-0.32
Identified motivation	1	7	5.79	1.41	1.79
Intrinsic motivation	1	7	4.63	1.20	0.63
Integrated motivation	1	7	4.86	1.72	0.86
Current importance to identity	1	7	4.63	1.53	0.63
Future importance to identity	1	7	5.49	1.46	1.49

Table 4: Temporal characteristics of frozen goals – Study 1.

Temporal Characteristic	Count	Percentage
How long have you had this goal		
1–6 months	30	16.5
6–12 months	25	13.7
1–2 years	35	19.2
2–3 years	27	14.8
Over 3 years	65	35.7
Anticipated start date		
In less than a month	86	47.3
In the next month	29	15.9
In the next few months	27	14.8
In the next 6 months	15	8.2
In the next year	9	4.9
In more than a year	5	2.7
Don't know	11	6.0
Estimated time to achieve the goal		
1 week	11	6.0
1 month	10	5.5
2–3 months	30	16.5
6 months	28	15.4
1 year	34	18.7
More than 1 year	42	23.1
Don't know	27	14.8
Anticipated completion date		
In less than a month	12	6.6
In the next month	10	5.5
In the next few months	20	11.0
In the next 6 months	33	18.1
In the next year	52	28.6
In more than a year	32	17.6
Don't know	23	12.6

this random assignment was used to ensure comparable group sizes. This allowed us to examine the characteristics of frozen goals compared to active goals, using the same characteristics that were examined in Study 1.

Method

Procedure

Participants were randomly assigned to report on a frozen goal (*n* = 111) or active goal (*n* = 113). Both questionnaires featured the same items, but with tailored wording relevant to the goal. Participants in the frozen goal group read the same description of frozen goals as in Study 1. If the participant did not have a frozen goal, he/she was redirected to complete the questionnaire assessing an active goal; these participants were excluded from the analysis. Participants were asked to complete the questionnaire while thinking about their frozen or active goal. Lastly, participants reported their gender and age.

Goal descriptions. As in Study 1, all participants described what their goal is, why it is important to them, and why they are pursuing the goal in open-ended items. The goal descriptions were categorized by the same independent coders as in Study 1 (*ICC* = .79, 95% CI [.73, .84]); any discrepancies were resolved by the lead author. These open-ended items were coded into categories to determine whether certain goals were more likely to be frozen.

Goal characteristics. Participants rated their frozen or active goal progress, goal importance, reasons for pursuing the goal, goal temporal characteristics, and the goal's relation to one's identity. Participants also rated whether they felt they had the skills to achieve the goal, how committed they felt towards the goal, how difficult it is/was to achieve the goal, and whether they made specific plans on how to achieve the goal. These measures were the same as those used in Study 1. The same two coders as in Study 1 coded each frozen and

active goal description on a scale of 1 to 5 from abstract to concrete, with higher values representing more concrete. The coders had excellent agreement ($ICC = .78$, 95% CI [.72, .84]) and again a mean score was calculated based on both coders' ratings.

New to Study 2, participants reported whether the frozen or active goal was a **'want-to' to 'have-to'** goal (1 = *Completely want-to*, 7 = *Completely have-to*). Next, participants reported on their **intrinsic motivation** ("To what extent are you pursuing this goal to attain personal satisfaction/enjoyment?") and **extrinsic motivation** ("To what extent are you pursuing this goal to attain monetary rewards/gains?") for pursuing the goal (1 = *Not at all*, 7 = *Very*). Also, participants rated using a Likert scale how much achieving the goal would affect their happiness (1 = *Not at all*, 7 = *Very*).

Temporal characteristics. In addition to the temporal characteristics from Study 1, participants also estimated in months how long they have had their goal. We further assessed the participant's subjective likelihood that he/she will achieve their goal in the next year, next 3 years, next 5 years, and next 10 years using slider scales (0 = *Very Unlikely* and 100 = *Very Likely*).

Results

The purpose of this study was to compare the descriptive qualities of frozen goals to active goals. To analyze how frozen goals differed from active goals, we used a series of independent samples t-tests to compare characteristics. Since the purpose of the study was exploratory, we used an alpha level of .05 for all comparisons, to ensure we did not miss any potentially significant differences.

Like the previous study, preliminary analyses revealed that health goals were the most prevalent for both frozen (34.2%) and active goals (42.7%), followed by career goals (19.4%) for frozen goals and finance goals (23.4%) for active goals (see **Table 2**). Compared to active goals, participants reported that frozen goals were more difficult and that they made less progress on them (see **Tables 5** and **6** for all statistics). Consistent with the previous study, frozen goals were reported as being important to both have and achieve, although active goals were perceived as being even more important. Despite being important, however, participants reported that they were less committed and put in less effort in pursuing their frozen goal compared to their active goal. Interestingly, there were no significant differences in want-to vs. have-to motivation for pursuing each goal, or in the individual types of motivation (i.e., extrinsic, identified, etc.). As for temporal scope, independent coders also revealed that frozen goals tended to be more abstract than active goals, which is consistent with participants' reports that they were less likely to have specific plans to achieve their frozen goal (compared to active goals). In a similar vein, participants reported that they have been holding on to their frozen goal for an average of nearly 6 years, yet 48% optimistically report that they will start pursuing the goal within the next month. While participants do seem to think that there is a good chance that they will achieve their goal within the next several years, they report being even more likely to achieve their active goals.

Brief Discussion

Study 2 examined the differences between frozen and active goals. On average, individuals maintain frozen goals 4.5 years longer than active goals, but in all that time, people make less progress, put in less effort, and are less committed to a frozen (vs. active) goal. Frozen goals are less important than active goals, but they are still important relative to the midpoint. In terms of motivation, frozen and active goals do not differ on want-to and have-to motives and are similarly motivated by goal importance, values, others, fun, and guilt. This suggests goal motivation is not the precursor of frozen goals. In terms of goal planning, individuals with frozen goals make fewer plans for how to achieve the goal and that believe they have less skills and resources to achieve the goal than those with active goals. This lack of planning and overestimation of effort may influence the perceived high difficulty of starting and completing frozen goals, which then delays progress and achievement, while goal importance impedes goal disengagement and the frozen goal remains in limbo.

Study 3

The first study established the prevalence of frozen goals, and the second study examined how they differ from active goals. However, many questions remain. First, do frozen goals remain 'frozen' in perpetuity, or are they sometimes attained or abandoned? And if that is the case, how do these former frozen goals differ from frozen goals that are still maintained? This third study investigates these questions, comparing frozen goals individuals currently have to frozen goals that they have either abandoned or achieved in the past. We examine these subcategories of frozen goals using the same characteristics as in Study 2. By comparing abandoned and achieved frozen goals to current frozen goals, we explore whether frozen goals can be achieved or abandoned (vs. maintained indefinitely), as well as the critical factors that underlie the differences between these goals. Such information is helpful in framing current frozen goals and determining what 'unfreezes' a frozen goal. Furthermore, we assess whether some people are more likely to let go of frozen goals by examining their general ability to disengage from goals. Disengaging from a goal results in decreased effort and goal commitment (Wrosch et al., 2003) and people are more likely to disengage from goals motivated by have-to (rather than want-to) reasons (Ntoumanis et al., 2014; Holding et al., 2017). We assessed goal disengagement to examine whether individuals who have trouble disengaging from goals report having more past and/or current frozen goals.

Methods

Procedure and Measures

After agreeing to participate, participants completed a brief questionnaire assessing goal disengagement and reengagement. They then read the same frozen goal description that was used in the previous studies. They were asked whether they currently have such a frozen goal and whether they had a frozen goal in the past, which they either achieved or abandoned. Participants were able to select as many frozen goal subcategories as

Table 5: Comparing characteristics between frozen and active goals – Study 2.

	Active Goal		Frozen Goal		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Progress ^a	35.30	25.60	22.24	21.58	3.96	<.001	0.55
Important to have goal ^b	6.38	0.92	5.99	1.16	2.72	.010	0.38
Important to achieve goal ^b	6.46	0.96	6.12	1.10	2.38	.018	0.33
Effort ^b	5.50	1.35	3.20	1.54	11.56	<.001	1.59
Want-to (1) or have-to (7)	4.35	2.08	4.36	1.92	-0.01	.991	0.00
Pursue for satisfaction ^b	5.41	1.63	5.20	1.73	0.88	.381	0.12
Pursue for rewards ^b	3.30	2.40	2.94	2.28	1.12	.265	0.16
Skills and resources ^b	5.95	1.37	5.26	1.60	3.39	.001	0.47
Goal commitment ^b	5.89	1.23	4.75	1.48	6.11	<.001	0.84
Difficult to achieve ^b	5.19	1.53	5.43	1.41	-1.19	.235	-0.17
Specific plans ^b	5.26	1.51	3.68	1.70	7.12	<.001	0.98
Past effort ^b	5.16	1.49	4.14	1.49	4.95	<.001	0.69
Time to achieve once start	4.83	1.44	5.13	1.47	-1.50	.135	-0.21
Goal completion date	1.74	1.24	2.32	1.54	-3.04	.003	-0.42
How long have you had this goal (in months)	14.64	28.23	69.14	108.97	-5.10	<.001	-0.71
Extrinsic motivation ^b	2.27	1.72	2.09	1.59	0.76	.449	0.11
Introjected motivation ^b	3.97	2.09	3.88	2.17	0.33	.744	0.05
Identified motivation ^b	6.10	1.36	5.99	1.43	0.56	.575	0.08
Intrinsic motivation ^b	4.41	1.99	4.38	2.08	0.11	.916	0.01
Integrated motivation ^b	5.13	1.78	4.97	1.85	0.65	.515	0.09
Likelihood achieve next year ^a	67.96	31.76	45.90	30.83	5.08	<.001	0.71
Likelihood achieve in 3 years ^a	76.08	31.96	62.22	29.61	3.24	.001	0.45
Likelihood achieve in 5 years ^a	81.44	29.73	67.75	30.86	3.26	.001	0.45
Likelihood achieve in 10 years ^a	83.12	30.62	72.68	30.74	2.45	.015	0.34
Happiness (1 to 9)	7.92	1.45	7.72	1.48	0.97	.334	0.13
Difficult to start ^b	4.42	1.93	5.18	1.71	-3.04	.003	-0.42
Difficult to finish ^b	5.44	2.01	6.18	1.68	-2.88	.004	-0.40
Current importance to identity ^b	5.22	1.22	5.07	1.27	0.87	.386	0.12
Future importance to identity ^b	5.63	1.37	5.62	1.40	0.05	.959	0.01
Goal construal (coded; 1 to 5)	3.27	0.92	2.60	0.63	6.17	<.001	0.85

Note: ^a signifies variable rated on 0 to 100 scale. ^b signifies variable rated on a 1 to 7 scale.

they experienced. They also estimated how many frozen goals they abandoned, achieved, and/or currently have. Next, participants were randomly assigned to complete a questionnaire regarding only one of the frozen goal subtypes that they reported having – that is, if participants reported having all three, they were randomly assigned to one of those three; if they only reported two, they were randomly assigned to one of those two, and if they only had one, they completed questionnaires associated with that one subtype. This resulted in 96 participants being assigned to past abandoned, 68 to past achieved, and 130 to current frozen goals. Finally, all participants completed a questionnaire to assess their mood while thinking about

their relevant frozen goal subtype. After completing all the questionnaires, participants reported their gender and age.

Goal disengagement. The Goal Adjustment Scale (Wrosch et al., 2013) consists of 10 items rated using a Likert scale (1 = *Strongly Disagree*; 7 = *Strongly Agree*). Mean scores were computed for the disengagement (e.g., “I find it difficult to stop trying to achieve the goal.”) and reengagement (e.g., “I tell myself that I have a number of other new goals to draw upon.”) subscales with Cronbach alpha values of .80 and .89, respectively.

Goal characteristics. As in Study 2, participant completed questionnaires assessing goal progress, importance, effort, goal motivation (extrinsic, introjected,

Table 6: Temporal characteristics of frozen and active goals – Study 2.

Temporal Characteristic	Frozen Goal (<i>n</i> = 98)		Active Goal (<i>n</i> = 113)		Chi-square
	Count	Percentage	Count	Percentage	
When do you want to (did you) start working towards the goal?					
In less than a month	29	29.59	20	17.70	$\chi^2(6, n = 211) = 34.64,$ $p < .001$
In the next (last) month	18	18.37	37	32.74	
In the next (last) few months	12	12.24	16	14.16	
In the next (last) 6 months	9	9.18	20	17.70	
In the next (last) year	9	9.18	19	16.81	
In more (less) than a year	3	3.06	1	0.88	
Don't know	18	18.37	0	0.00	
How much time will it take to achieve the goal?					
1 week	0	0.00	2	1.77	$\chi^2(6, n = 211) = 7.80,$ $p = .253$
1 month	2	2.04	4	3.54	
2–3 months	17	17.35	15	13.27	
6 months	16	16.33	26	23.01	
1 year	14	14.29	21	18.58	
More than 1 year	29	29.59	33	29.20	
Don't know	20	20.41	12	10.62	
When do you want to have the goal achieved?					
Next year	45	45.92	71	62.83	$\chi^2(4, n = 211) = 12.74,$ $p = .013$
Next 3 years	19	19.39	24	21.24	
Next 5 years	9	9.18	6	5.31	
Next 10 years	8	8.16	1	0.88	
This goal does not have a deadline	17	17.35	11	9.73	

identified, intrinsic, and integrated), commitment, resources, difficulty, temporal characteristics, identity, and happiness. Additional items were added to assess goal priority using a slider item (“What is/was the priority of this frozen goal as compared to other goals you are/were pursuing at the same time?”; 0 = *Lowest Priority*; 100 = *Highest Priority*) and the frequency of thoughts about the frozen goal using a Likert scale (“How often do/did you think about this frozen goal?”; 1 = *Not at All*; 7 = *Often*). Wording (e.g., use of verb tense) was adapted to each of the questionnaires. The same two coders from Study 1 and 2 also coded how concrete and abstract the goal description was for each subtype of frozen goal ($ICC = .70$, 95% CI [.62, .76]). A mean score of the two coders' ratings was computed and used for analysis.

All participants also described the goal, why they are/were pursuing it, and why the goal is/was important to them in open-ended items. The goal descriptions were categorized by the same independent coders as in the previous studies ($ICC = .90$, 95% CI [.88, .92]); any discrepancies were resolved by the lead author.

Mood. The Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) consists of 10 positive affect items (e.g., “interested, inspired, strong”) and

10 negative affect items (e.g., “nervous, guilty, afraid”) adjectives. Participants rated using a Likert scale (1 = *Not at All*; 7 = *Very*) how much each adjective described how they felt while thinking about their current, past abandoned, or past achieved frozen goal. Mean scores for the positive affect ($\alpha = .92$) and negative affect ($\alpha = .92$) subscales were computed.

Results

In Study 3, we examined differences between three subcategories of frozen goals, namely past abandoned, past achieved, and current frozen goals. The design of the study allowed us to assess both the prevalence of each subcategory and compare the characteristics of each. Along with the previous studies, Study 3 is exploratory in nature and directional hypotheses were not tested.

Most participants (58.8%) again reported having at least one current frozen goal. Additionally, 45.8% reported having previously abandoned frozen goal(s), and 28.9% reported having previously attained frozen goal(s). Participants reported an average of 1.81 ($SD = 1.01$) current frozen goals, 2.67 ($SD = 2.49$) past abandoned frozen goals, and 2.89 ($SD = 3.48$) past attained frozen goals. Preliminary analyses (see **Table 2**) revealed that

health goals were among the most frequent across achieved (34.8%) and current frozen goals (28.7%), while career goals were the most common abandoned frozen goal (28.7%).

The most prominent characteristic of abandoned frozen goals is that they were rated as being the least important compared to both current and achieved frozen goals (Table 7 for all statistics). All other characteristics were at least comparable to either active or achieved goals. For example, participants reported making less progress on current frozen goals compared to abandoned and achieved frozen goals. With respect to past frozen goals that have been achieved, such goals were reported as being the highest in priority, having the greatest level of

commitment, and participants made more plans to aid in their pursuit. Despite goal difficulty being comparable across all frozen goal types, participants report putting in the most effort into their achieved frozen goals. However, it still took an average of 7 years (84 months) to achieve, suggesting that despite participants evaluating these goals as more important, they were still frozen for many years. There was a significant difference in how long participants estimated it would take to achieve the goal once they started working on it, $\chi^2(12, n = 295) = 25.01, p = .015$. Participants reported it would take more than a year to achieve their abandoned (44.8%), achieved (36.8%), and current (32.8%) frozen goals, suggesting frozen goals are longer term goals. There were no significant differences

Table 7: Omnibus F-test results with means across frozen goal subcategories – Study 3.

Variable	Current	Abandoned	Achieved	F	p	η^2
	M(SD)	M(SD)	M(SD)			
Progress ^d	27.24 (19.67) ^a	43.13 (26.67) ^b	50.84 (34.11) ^b	20.94	<.001	.13
Important to have goal ^e	6.07 (1.15) ^b	5.13 (1.26) ^a	6.03 (1.27) ^b	18.76	<.001	.11
Important to achieve goal ^e	6.11 (1.16) ^b	5.19 (1.21) ^a	6.21 (1.24) ^b	20.72	<.001	.12
Goal priority ^d	52.51 (28.24) ^b	52.31 (26.51) ^b	65.49 (24.20) ^a	6.25	.002	.04
Effort ^e	3.99 (1.66) ^a	4.55 (1.48) ^b	5.75 (1.29) ^c	29.53	<.001	.17
Extrinsic motivation ^e	2.39 (1.86)	2.68 (1.93)	2.88 (1.88)	1.89	.152	.01
Introjected motivation ^e	3.50 (2.03)	3.10 (2.07)	3.93 (2.08)	2.69	.070	.02
Identified motivation ^e	6.00 (1.36) ^b	5.05 (1.59) ^a	5.72 (1.32) ^b	12.14	<.001	.08
Intrinsic motivation ^e	4.43 (2.04)	4.68 (1.94)	4.58 (2.15)	0.49	.613	.003
Integrated motivation ^e	5.09 (1.62) ^a	4.34 (1.91) ^b	4.87 (1.84) ^{ab}	4.84	.009	.03
Want-to (1) or have-to (7)	3.92 (2.04)	3.57 (1.91)	3.78 (2.12)	0.92	.399	.01
Pursue for satisfaction ^e	5.44 (1.66)	5.40 (1.54)	5.78 (1.44)	1.11	.330	.01
Pursue for rewards ^e	3.50 (2.31)	3.14 (2.13)	3.36 (2.18)	0.85	.431	.01
Skills and resources ^e	5.40 (1.67) ^{ab}	5.04 (1.58) ^b	5.72 (1.28) ^a	3.91	.021	.03
Goal commitment ^e	5.17 (1.48) ^b	4.94 (1.39) ^b	5.85 (1.30) ^a	7.31	.001	.05
Difficult to achieve ^e	5.27 (1.52)	5.57 (1.23)	5.03 (1.60)	2.74	.066	.02
Specific plans ^e	4.03 (1.79) ^b	4.51 (1.73) ^b	5.25 (1.68) ^a	10.59	<.001	.07
Past effort ^e	4.70 (1.41) ^b	4.89 (1.31) ^b	6.00 (1.32) ^a	19.41	<.001	.12
How long have you had this goal (in months)	60.72 (87.63) ^{ab}	45.49 (68.71) ^a	83.98 (116.64) ^b	3.14	.045	.02
How long ago did you abandon/achieve the goal (in months)	–	52.05 (66.90) ^a	27.15 (47.95) ^b	6.83	.010	.04
Having goal importance to identity ^e	4.67 (1.63)	4.20 (1.57)	4.53 (1.40)	2.44	.089	.02
Achieving goal importance to identity ^e	5.58 (1.53) ^b	5.03 (1.48) ^a	5.71 (1.36) ^b	5.26	.006	.04
Happiness ^e	5.98 (1.14) ^a	5.13 (1.36) ^b	5.62 (1.41) ^c	12.26	<.001	.08
Difficult to start ^e	4.89 (1.65)	4.79 (1.58)	5.03 (1.74)	0.60	.551	.003
Difficult to finish ^e	6.21 (1.64)	6.28 (1.32)	5.83 (1.71)	2.14	.119	.02
Frequency think about goal ^e	5.48 (1.45)	5.19 (1.39)	5.67 (1.41)	2.10	.125	.02
PANAS positive affect ^e	4.46 (1.29)	4.44 (1.31)	4.45 (1.35)	0.01	.995	<.001
PANAS negative affect ^e	2.72 (1.46)	2.44 (1.41)	2.63 (1.39)	1.08	.343	.007

Means across the same row that do not share a letter subscript differ at $p \leq .05$. ^{ab} Means are not significantly different from other means in that row. ^d signifies variable rated on 0 to 100 scale. ^e signifies variable rated on 1 to 7 scale.

between active, abandoned, or achieved frozen goals in terms of level of abstraction, difficulty, and motivation, and no significant differences in mood when participants thoughts about their current, past abandoned, or past achieved frozen goals.

Goal disengagement. To examine individual differences in goal disengagement, we examined whether trait goal disengagement and reengagement was related to the number of previously abandoned and/or achieved frozen goals. There were no significant correlations between goal disengagement or reengagement for past abandoned (disengage $r = -.07$, $p = .449$; reengage $r = .01$, $p = .872$), past achieved, (disengage $r = -.15$, $p = .221$; reengage $r = .07$, $p = .533$), and current (disengage $r = .06$, $p = .459$; reengage $r = .14$, $p = .075$) frozen goals. This suggests that one's ability to disengage from goals is not related to the number of past or current frozen goals.

Brief Discussion

This study examined the differences between past and current frozen goals. Individuals who abandoned frozen goals believed their goal to be less important, less influential on their identity, and less likely to influence their happiness. Those who achieved their once frozen goal reported making greater effort into achieving the goal, making the frozen goal a higher priority, and making more plans on how to pursue the goal, as well as stronger beliefs that they had the skills and resources necessary to achieve the goal. This may suggest that individuals with current frozen goals may need to work on the pragmatic details of their goal pursuit (e.g., making a plan of action, reprioritizing other goals). However, as with all the past frozen goal estimates, participants may have memory biases and underestimate how important the goal was to them at the time (e.g., "since I abandoned the goal, it must not have been that important"). Likewise, individuals who already achieved their frozen goal may be positively biased when recalling their achieved goal.

General Discussion

Across three studies, we find initial evidence that frozen goals are a distinct type of goals that individuals hold onto and do not seem to want to let go. Study 1 demonstrated that frozen goals are commonplace, suggesting most people (92%) have some experience with a frozen goal. In Study 2, frozen goals were differentiated from currently pursued goals on ratings of progress, effort, importance, and temporal characteristics. Of particular interest is the stark difference in how long people have frozen goals (five years and nine months) as compared with active goals (one year and two months). This temporal difference is vital in the definition and identification of frozen goals. Overall, this research suggests that frozen goals typically are intrinsically motivated goals of any nature that people have made little effort on over many years and are not consistently pursued, but these goals are nonetheless important, and individuals still feel committed to these goals.

Study 3 examined frozen goals from a different perspective by comparing past and current frozen goals

to discover differences between those who eventually achieve or abandon the goal. This study suggests that frozen goals can be successfully achieved or abandoned, meaning that change is possible in frozen goals and they are not inherently unachievable (with 28.2% of people achieving a once frozen goal). Prior to achievement, these goals were considered frozen for nearly 7 years on average. However, the more likely scenario is that the frozen goal will be abandoned, as 46.3% of people reported finally giving up on their frozen goals. When such changes (i.e., abandoning or achieving) occur in frozen goals, the status of the goal changes. If one decides to achieve a frozen goal, that goal will no longer be frozen if that person will actively work towards completing the goal. Achieving the frozen goal does not mean the goal was never frozen, but rather that it progressed from a frozen to an active goal. Likewise, if the frozen goal is abandoned, this does not mean the frozen goal was never frozen, but that the frozen goal shifted to complete disengagement. In sum, Study 3 demonstrated that frozen goals can transition out of this purgatorial stage of goal pursuit and are not doomed to be forever frozen.

In certain aspects, frozen goals seem like nothing more than fantasies of what people want to achieve. However, although some elements of frozen goals and fantasies may overlap (e.g., lack of effort, progress), frozen goals are more than merely fantasies (i.e., images of future experiences of desired events, independent of reality; Oettingen et al., 2001). Unlike fantasies, frozen goals are considered important to both have and to achieve (Study 1–3). If people approached their frozen goals as they do fantasies, there would be no need for achievement because a fantasy does not need to be achieved. By definition, fantasies are independent of the likelihood that they will actually occur (Oettingen et al., 2001). All present studies demonstrated that frozen goals are not limited to certain types of aspirational goals that are beyond the realm of achievement; the types of frozen goals people have (e.g., lose weight, buy a house) are indeed achievable goals. Not only are frozen goals attainable in principle, individuals also report believing they will attain the goal at some point in the future, thereby distinguishing them from fantasies or from irrevocable goals (Miceli, & Castelfranchi, 2017). Furthermore, we found no differences in positive or negative affect when individuals thought about the frozen goals they achieved, abandoned, or are currently maintaining, suggesting that, unlike irrevocable goals, frozen goals do not impact one's emotional well-being.

Nonetheless, it may be helpful to note some of the ways that fantasies and expectations can influence our thinking about frozen goals. Past research has found that individuals who had positive fantasies (as compared with high expectations) made less effort on pursuing a goal and thus had less progress (Oettingen, & Mayer, 2002). Individuals with frozen goals do make less effort on achieving the goal (Studies 2 and 3) and believe they have less skills and resources for achieving the goal (Studies 2 and 3). However, this may be attributed not to wishful thinking with no intention for action, but a lack of priority on the particular frozen goal (Study 3). Fantasies of an end

state can redirect a person's attention to when he/she will achieve the goal and prevent him/her from imagining future challenges and how he/she will achieve the goal (Oettingen et al., 2001). Thinking about the process as opposed to the outcome can also influence effort and performance, whereby focusing on the necessary steps of pursuing a goal (e.g., studying and writing papers) promotes greater effort and performance than focusing on the moment of achievement of the goal (e.g., getting an A). Study 1, 2, and 3 demonstrated that frozen goals are not limited to abstract outcomes, but can be both abstract (e.g., being healthy) and concrete (e.g., exercise three times a week). Thus, unlike fantasies, frozen goals do not only focus on the outcomes, but can be either outcome or process focused. Future research could examine the similarities and differences between frozen goals and fantasies by replicating the current research and measuring both fantasies and frozen goals.

Limitations and Directions for Future Research

A potential limitation of this research is the influence of memory biases in the recall of past frozen goals. Individuals with past abandoned frozen goals may have underestimated some of the ratings to conform to their abandonment of the goal. For example, they may think, 'I abandoned this goal, so it must not have been that important to me'. Likewise, individuals who achieved their frozen goals may have overestimated the ratings. For example, 'I achieved this goal, so it must have been very important to me'. Such memory biases come at the expense of using self-report. Furthermore, as this is new research in a yet unstudied topic, the studies and analyses were exploratory. Such exploration allowed us to broaden our scope of interest beyond specific predictions and examine differences across many characteristics. A further limitation is that all constructs, apart from goal disengagement and affect, were reported using single item measures. While these measures are face valid and research indicates that single item measures can be enough to measure constructs (e.g., Hoepfner, Kelly, Urbanoski, & Slaymaker, 2011), it may still introduce measurement bias and influence the results. Additionally, since all three studies were purely exploratory, future confirmatory studies, with more comprehensive measures are needed to confirm our findings.

Frozen goals are a new area of goal pursuit research and future directions in research are plentiful. Based on the presented research, future research can replicate and extend our findings in longitudinal studies that assess people's frozen goals unfold over time (e.g., how do they come to be, when exactly do they become frozen, etc.). Examining the temporal characteristics of frozen goals will help in defining frozen goals and distinguishing them from currently pursued goals (e.g., when pursuing a healthy eating goal, does having a cheat day mean the goal is frozen for one day?). Also, of particular interest may be to examine whether there are differences between frozen goal types. For example, health-related goals seem to be the most popular frozen goals. Research could examine whether certain frozen goals (e.g., weight loss

goals) are pursued, achieved, or abandoned differently than other types of frozen goals (e.g., financial goals). The present research showed goals that involve learning a new skill might be more susceptible to abandonment (Study 3). Such an investigation may shed light on the idiosyncrasies of frozen goals and help distinguish frozen goals from one another.

Understanding frozen goals and how they change can have real life applications in helping people achieve their goals. For many people, weight loss is paramount to their health, well-being, and quality of life. For such individuals, knowledge of what they can do to prevent their weight loss goal from becoming 'frozen' or what they can do to 'unfreeze' it can be crucial. Bringing frozen goals into the foreground may be enough to facilitate change for some individuals. Research on frozen goals and how they develop and change can also be carried over to other areas of research, such as procrastination and goal disengagement, and help both individuals and researchers gain a better understanding of goals. Furthermore, research on frozen goals can potentially fill a void in the goal literature between disengagement and achievement, thereby highlighting the complexity of goal pursuit and the nonlinear process to achievement. Considering how commonplace frozen goals are, research into this phenomenon can be applied to many people (i.e., frozen goals are not limited by individual differences) and situations (i.e., almost any goal can be a frozen goal).

Conclusion

In the present research, we demonstrate that most people have a personally important goal on which progress is stagnant for long periods, yet they refuse to disengage from the goal. This novel area of research has been previously ignored, with a focus primarily on either achieved or abandoned goals, but not the kinds of goals that fall in-between. This research opens many avenues for new questions and new perspectives on goal pursuit and goal setting. We showed that most people have goals that are important to them and which they want to achieve, but they do not put in the effort to actually achieve the goal, nor do they let it go – making such goals frozen.

Data Accessibility Statement

Data files (.csv and .sav formats) for the studies presented can be found through the supplemental materials link on OSF. The variable labels in the data files correspond to the labels in the study material files.

Supplemental Material

The unabridged surveys and data for all studies are available on the Open Science Framework (OSF; https://osf.io/u6fhz/?view_only=6eca8d6d686c44e5b6def194e5680700).

Notes

- ¹ The past frozen goal and active goal questionnaire ratings were not analyzed due to the low prevalence of these goals, 12.3% and 7.9%, respectively. See OSF for full set of questionnaires for all three goals.

² The Life Orientation Test (Scheier, Carver, & Bridges, 1994) was intended to examine differences in optimism between participants with frozen and active goals. This scale was not analyzed because the high prevalence suggests frozen goals are not dependent on individual differences and the unequal group sizes prevent meaningful comparisons.

³ Cohen's *d* was computed using an online calculator using the *t*-value and the degrees of freedom of each *t*-test.

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Competing Interests

The authors have no competing interests to declare.

Author Contributions

- Contributed to conception and design: MD, MM
- Contributed to acquisition of data: MD, MM
- Contributed to analysis and interpretation of data: MD, MM
- Drafted and/or revised the article: MD, KW, MM
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